In the Doorway to Development:

An enquiry into market oriented structural changes in Norway
ca. 1750-1830

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Weights, measures and currencies
These are the weights, measures and currency units used in the following text.

Danish-Norwegian length units between 1683 and 1824)
1 alen (63,26 cm) = 2 feet
1 foot (31,6 cm) = 12 inches
1 inch (2,62 cm) = 12 lines

Danish-Norwegian volume and weight units between 1683 and 1824
1 pott = 1/32 cubic foot
1 smørtønne (butter barrel) = 136 potter
1 korntønne (grain barrel) = 144 potter
1 skjeppe = 1/8 korntønne
1 skålpad = 1/62 of the weight of a cubic foot of water (499,5 g). (often called handelspund)
12 skålpad = 1 bisperpund (1 bisperpund = 5,977 kg)
16 skålpad = 1 lispund (1 lispund = 7,992 kg)
12 skålpad = 24 merker (1 merke = 249,875 g)
1 skippund = 20 lispund à 16 skålpad, or 32 merker = 640 merker (1 skippund = 159,920 kg)
1 vog = ca. 18 kg. Weight used for fish

Currency
1 Riksdaler (rdl) = 6 mark (mk) = 96 skilling (sk) (most common in western Norway)
1 Riksadler (rdl) = 4 Ort (o) = 96 skilling (sk) (most common in Eastern Norway)
Chapter 1: Introduction

1.1 Hypothesis:
Most studies of pre-industrial economic and structural change focus on the economically leading regions or countries of the time, or use this development as an ideal by which to evaluate and compare change occurring in other countries. By doing so the scholarly debate loses sight of the many possible roads to economic development, as well neglecting the changes occurring in other less successful regions. This thesis aims at abating this. It will do so by examining the structural and economic changes which occurred in Norway during the pre-industrial period, a country lying in the outskirts of the European economic growth area. It asks what were the implications of changes in production, the gradual development of a Norwegian internal market, decisions made at the household level concerning market participation, as well as changing trends in the consumption of durable, semi-durable and perishable goods, for economic and social development in Norway. It also examines how these changes impacted on Norway’s later Industrialisation and entry into a modern market economy. The time period focused on is primarily 1750 to 1830.

As sources covering the first decades of the 19th century are sparse, much of the evidence used in this thesis concerns the period before 1800. It is obvious, however, that this does not invalidate the main thesis; that crucial changes took place in the period before 1840, and that these changes help explain how Norway, when it entered the Industrial Revolution, did so quickly, and relatively successfully. The period 1800-1830 was a continuation, and in some cases even an acceleration of previous trends in structural change.

That economic development took place in pre-industrial Norway is indicated by applying the most often used tools for analysis of modern economies. Even if GDP estimates are not available due to lack of sources, back projections, a method which many are skeptical of when used for history because of the many uncertainties and lack of sources, show that Norwegian
per capita GDP was 722 \textquotedblleft1990 Int. GK dollars\textquotedblright in 1700, rising to 801 in 1820. This was slightly below the Western European average of 1032 and 1243 respectively.\textsuperscript{2} Norwegian sources for the war and post war years are chaotic, and GDP estimates for Norway are only available from 1830. These show a gradual growth from 1830, taking off from the 1850’s when industrialization set in proper. Agnus Maddison’s estimates, though much debated and to be used with caution, do indicate an annual growth rate for Norway of 0,54 percent 1500-1820 and 1,7 percent between 1820-70, while the population grew with respectively 0,37 percent and 1,17 percent in the same periods.\textsuperscript{3}

Norwegian CPI calculations for the period prior to 1820 are biased toward urban areas, especially Bergen, and the number of goods covered is limited. Bearing these factors in mind, they show an estimated average inflation of 0.5 percent per annum until the end of the mid 1790’s and the start of the Napoleonic war, when inflation took off. The relevance of real wages for economies where wage labour was rare is debatable. Studies of Norwegian real wages, biased towards sailors and miners, show a rise in the last half of the 18\textsuperscript{th} century before plummeting during the Napoleonic war, and then rising again, outstripping price inflation from the 1820’s onwards\textsuperscript{4}

Applying modern economic indicators to a period which pre-dates the development of the modern market economy is somewhat unhelpful when trying to capture the complex and numerous changes which took place within the pre-industrial economy. Data is often lacking or biased, and since society was structured differently, modern indicators cannot adequately describe them. For this reason this thesis has relied upon other indicators, such as changes in production and consumption at both national and household level, in order to capture if, how

\textsuperscript{1} 1990 International Geary-Khamis dollars.
\textsuperscript{2} Maddison, A.: \textit{Statistics on World Population, GDP and Per Capita GDP, 1-2006 AD}, Available online: http://www.ggdc.net/Maddison/
and why economic development and change occurred, and what consequences this had for developments in the rural Norwegian economy ca 1750 to 1850.

This study focuses especially on the farming communities in rural areas, as this encompasses the majority of the Norwegian population. The communities discussed in this study reflect the different ways in which rural communities and households engaged with the market. They should therefore not be understood as representative of Norway in general, but as examples of different forms of market integration. Urban areas and elites receive attention for the extent to which they interacted with the rural farming population, but since they were few and their experiences not necessarily representative of the majority of the population, they have been largely omitted from this study.

This study is written with an international audience in mind, and therefore generalizations less customary amongst more empirically oriented Norwegian historians have had to be made. The aggregated level has also dictated the need for identifying long lines and trends, and thus local specificities have in many cases had to be left out. It should also be noted that because of the sources and general literature available the study has a bias towards eastern and north-western Norway. This is somewhat abated by examples from other regions, but it should be noted that some of the more market integrated regions in the south and north are only summarily covered.

1.2 Structure of thesis

The introduction discusses the theoretical and historiographic backdrop of the thesis, while chapter two focuses on the overall economic development in Norway in the late eighteenth and early nineteenth centuries. In this, the role of political factors, population and production is discussed in light of how they impacted on structural and economic development. Chapter three examines the formation of the Norwegian internal market. It emphasises the role of improvements in infrastructure and transportation, as well as the role of new laws in trade and retail in facilitating the growth of commerce and the inclusion of rural communities in both
interregional, domestic and international markets. In chapter four the thesis then moves on to look closer at households resources and wealth, before discussing the spread and impact new consumer trends in chapters 5 and 6. Chapter five is dedicated to changes in durable and semi-durable goods, while chapter 6 looks closer at perishables. Chapter 7 concludes the thesis by pointing out general trends over time, as well as analysing what characterised the economic and structural changes occurring in rural Norway prior to the onset of the modern market economy.

1.3 Theory

The traditional view of the industrial revolution is described as a fast growth, occurring first in Britain in the late 18th century, characterized by large scale mechanised factory production and continuous growth leading up to our time. Other countries followed, usually said to follow the British example. Central to this is the role of the supply of industrial products, which is claimed to be the driving force behind the industrial revolution.

For a long time, the main focus of discussions amongst economic historians was on changes in agriculture and the spread of the factory system. Agricultural developments increased production and enabled households to move away from self sufficiency and instead engage in other productive activities. But more significantly, it has been argued that technological change and the factory system during the late 18th century and especially in the 19th century raised production and economic circulation which enabled the Industrial revolution. Joel Mokyr and David Landes have been amongst the foremost to argue this. However, in 1972 Franklin Mendels proposed the theory of proto-industrialisation to describe the expansion of domestic industries producing goods for non-local markets which took place in many European countries already in the early modern period. It was defined as production for sale outside the region, which employed previously untapped labour resources (either part or full-time) and occurred in symbiosis with agriculture. It was also supposed to be the first and

necessary step towards an industrial revolution since it created a supply of proto-industrial products. Subsequent studies revealed numerous difficulties with the proto-industrial theory, one being the ambiguous definition of region, another being that there was no clear link between industrialized areas in the industrial revolution, and “proto-industrial areas”.

In the wake of the economic crisis of 1973 some historians began to analyse questions such as why there had not been more growth during the industrial revolution, whilst others did micro-economic research which discounted many of the achievements of the industrial revolution. The work of these historians and economists revealed that gross domestic production rose slower in the early part of the industrial revolution (ca 1750 to 1850) than had been previously thought. Their statistics pointed out that productivity was sluggish, that fixed capital proportions, savings and investment changed only gradually, and that the living standards and personal consumption of workers remained unaffected until the 1830’s. Summed up, their results indicated that: “England never experienced a period of commitment to industrial growth: the industrial revolution was a brief interruption in a great arch of continuity”.

The micro-economic studies were disputed by several social and economic historians such as Maxine Berg and Pat Hudson. Theirs, and many other studies, showed that society became increasingly market oriented, both with regards to market production and consumption. In 1982 Neil McKendrick proposed the theory of a “consumer revolution”, using the growing demand for goods at the market to explain the growth in the 19th century. He argued that since wage earners spent parts of their wages on consumer goods, and did not produce their own necessities, they became dependent on the market, thus stimulating increased production.

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The demand approach to the industrial revolution has been criticized by scholars such as Joel Mokyr who argued that neither agricultural growth, foreign demand, nor an increased labour force through population growth and the use of women and children, was sufficient to create a demand able to initiate or drive the industrial revolution. He concluded that \textit{The determination of “when”, “where” and “how fast” are to be sought first and foremost in supply, not in the demand related processes}.\textsuperscript{13}

Another angle to explain pre-industrial growth is the role of the development of a global market. As more parts of the world were connected by trade and economic networks, markets expanded and the possibility for profits grew. Colonies and the military might have ensured countries’ control of valuable resources, and increased the size of the market for locals as well as for Europeans.\textsuperscript{14} These perspectives tend to forget the role of inter-regional trade, such as that occurring between countries and regions in Europe during the early modern period, and how it helped create economic development. Patrick O’Brien showed that of the cross-border commodity exports in Europe at the time, some 76 percent went to other European states, 10 percent to North America, 8 percent to Latin America, 5 percent to Asia and 1 percent to Africa.\textsuperscript{15} Even if this was partly the re-exportation of goods originating on other continents, it still occurred in Europe, employed Europeans and was consumed by them, thus creating economic effects also in Europe. There is also reason to question how large the profits of the inter-continental trade were, compared to the inter-European.

The forming of internal markets has also been emphasised as an important explanatory factor for pre-industrial economic growth. As regions within the same country became integrated through the breaking down of regional borders and weakening of urban and group privileges, a larger, internal market within the state’s borders was created, enabling lower transaction

costs. Even if barriers were built against other states, the new trading area included more regions and thereby more producers and customers than before. The inter-regional trade made it less necessary to be self-sufficient, enabling regions and households to specialize on what they had a competitive advantage in. In this way markets became larger, competition increased, and profits grew; all spurring economic growth. The formation of new and disbanding of old institutions in an attempt to increase predictability and efficiency was one way that this occurred.\footnote{Polanyi, K.: The Great Transformation. The political and economic origins of our time, Beacon Press, UK, 1957, Chap. 4; North, D. C. and R. P. Thomas: The Rise of the Western World. A New Economic History, Cambridge University Press, UK, (15\textsuperscript{th}. Ed.),1999, p. 1-18.; Pollard, S.: “Regional markets and national development” in Berg, M. (Ed.): Markets and Manufacture in Europe in Early Industrial Europe, Routledge, London, 1991.}

In answer to the contrasting descriptions of the industrial revolution Jan De Vries proposed his theory of an “industrious revolution”. It places the industrial revolution in a broader perspective and is explained as a shift in household behaviour towards increased market production and consumption. It was a process of household-based reallocation of resources (such as labour and time) which increased –both- the supply of market commodities and labour, as well as the demand for market-supplied goods. In practice this could take the form of women and children becoming increasingly involved in market oriented production, instead of producing necessities for the household which could be bought at the market. According to De Vries the process was driven by commercial incentives in the form of changes in real prices and transaction costs, as well as in taste. The latter was often created by aspirations of the family. The industrious revolution was an important demand side process which preceded and prepared the way for the industrial revolution in the 19\textsuperscript{th} century.\footnote{De Vries, J.: “The Industrial Revolution and the Industrious Revolution”, JEHR, vol. 54, no. 2/1994, p. 249, 255-7.; De Vries, J.: “Between purchasing power and the world of goods: understanding the household economy in early modern Europe”, in Brewer, J. and R. Porter: 1994.; De Vries, J. and A. Van Der Woude: The First Modern Economy, Success, Failure and Perseverance of the Dutch Economy, 1500-1815, Cambridge University Press, Cambridge, 1997.; De Vries, J.: The Industrious Revolution. Consumer behaviour and the household economy, 1650 to the present, Cambridge University Press, Cambridge, 2008.}

The industrious revolution thereby provides an explanation for the results of micro-economic studies, as well as those of cultural and social historians (both of which we will return to in the historiography section). The reallocation of resources within the household explains how
new labour (women and children) became available for market oriented production, making increased production possible. Simultaneously it explains why demand for consumer goods in the market place increased. Jan De Vries theory has proven to be a useful approach when studying the changes in household production and consumption of the early modern period.

1.4 Historiography of consumption in the early modern period

Research done by cultural and social historians indicate that the early part of the industrial revolution was characterized by increased market oriented consumption and production, spreading into a wider section of society. The studies are often based on probate inventories and wills, and supported by contemporary voices such as Daniel Defoe who tells of bustling, productive, activity in the English countryside, as well as countless complaints from, for example, priests and civil servants concerning the “immorally” high consumption and money wasted on luxury goods which in their eyes occurred amongst the poorer groups in society.18

As previously mentioned, Neil McKendrick declared in 1982 that “a consumer revolution” had occurred in 18th century England.19 He pointed to studies of probate inventories which showed that great changes had occurred in English consumption; where people had previously owned only modest belongings, the probate inventories of the 18th century tell of a multitude of possessions, many of which they previously could only have hoped to inherit. He explained the consumer revolution by pointing to the British social structure which was characterized by short distances between the classes stimulating a constant strive for social advancement. Luxury items such as silks and furniture were important indicators and symbols in this process, and the consumer revolution made available such items at more affordable prices in order to emulate those higher up the social ladder, a “trickle down effect” as some have called


it. He also emphasises changing intellectual attitudes to luxury expressed in political
discussions and policies in the 18th century.

Doubts have been cast on McKendrik’s “ emulation” as a drive for consumption. Lorna
Weatherill argues that it is not possible to make a “ once-and-for-all conclusion” to explain
why people consumed what they did in the early modern period and that there were, rather,
many factors which influenced consumption. Weatherill herself emphasises the social and
practical functions of the consumer goods in the daily lives of the middling groups. She also
emphasises the importance which supply and trade had for the accessibility of such goods,
and thus also for consumption patterns. In her study of consumption and domestic culture in
the Scottish highlands between 1720 and 1840, Stana Nenadic emphasised the changing role
of gendered use and control of the living spaces. Her study shows that at the start of the period
the most expensive items in the household such as pots, beds and linens were linked to the
areas dominated by women, such as kitchens and bedrooms. In the latter part of the 18th
century, with the spread of dining rooms, the dining room tables at which men conducted their
social and business lives became the most highly valued item. As with Weatherill, Nenadic
also emphasised the role of access to consumer goods as an important factor in consumption
patterns. Beverly Lemire’s work on the second hand market for textiles in England also
confirms that a consumer society was developing in the early modern period. Instead of
“ imitation” as a driving force for peoples’ consumption, she proposes that different
commodities had their own specific catalysts which influenced consumption not only “ top
down”, but also vertically and horizontally within a group and between groups.

As a reaction to the flourish of consumer “ revolutions” which many claimed to have found in
the wake of McKendrik’s theory, Carol Shammas has an evolutionary approach to the spread
of consumption in England and America in the early modern. Her work shows that a

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and L. S. Walsh (Eds.): Material culture: consumption, life-style and standard of living, 1500-1900,
Scotland in the first half of the eighteenth century: consuming at a distance”, British Journal for Eighteenth
22 Lemire, B.: Dress, Culture and Commerce. The English clothing trade before the factory, 1660-1800,
consumer market developed gradually and that large parts of the population participated in it, emphasising that social rank and wealth did not always dictate the degree of consumption. She concludes that *the individual who drank tea from a tea cup, wore a printed cotton gown and put linen on the bed, could be the same person who indigested too few calories to work all day and lived in a one-room house*.\(^\text{23}\) Daniel Roche adopted a different approach to the development of a consumer society in France. Instead of studying the objects consumed as commonplace or only for their role in society, as he claims others have done, he focused on how the place and function of the object, oftentimes everyday commodities like clothes, housing and water were transformed by the changing culture, more specifically the economic thinking of the enlightenment and the restrictive consumption of mercantilism.\(^\text{24}\)

A developing consumer society has been identified throughout Europe during the early modern period. Jan De Vries and Ad van der Woude found that in the case of the Netherlands, the consumption of new and often exotic goods replaced old products, such as with coffee, tea and chocolate which took over from beer.\(^\text{25}\) Maxine Berg has identified that domestic production in England also adapted to the developing consumer market, increasing the production of cheaper consumer goods such as more affordable textiles and toys.\(^\text{26}\) Improving material standards have also been identified in places as varied as the American colonies, Catalan in Spain, Tuscany, and in south-eastern Sweden during the long eighteenth century.\(^\text{27}\)


McKendrick’s “consumer revolution” has definitively influenced social and cultural historians, and brought about new perspectives and ideas.\(^{28}\) Most prominent amongst these are Jan De Vries, who has been discussed earlier. Maxine Berg developed the concept of a “consumer revolution” and an industrious revolution further. Influenced by the present globalisation she situates the 18th century British productivity and consumption growth within a global perspective.\(^{29}\) She focuses on the impact of imported goods and their role as driving factors in the development of a British consumer society and increased British productivity and innovation. She argues that the import of Asian consumer goods stimulated an industrious revolution because they were cheap and accessible for a wider part of the population, and because they inspired innovation and imitation amongst European producers. The increased availability changed and fuelled family aspirations such as social climbing or improved living conditions, facilitating the reallocation of household resources toward the market, as identified in the theory of an industrious revolution.

In Norway, the debate amongst historians dealing with structural changes leading to increased market orientation during the early modern period has, since the 1960’s, largely focused on a Norwegian version of the peasant/farmer-debate or “Brenner-debate”.\(^{30}\) The focus has mainly been on whether (and if so, how) the population was pushed to engage in market activities, or if people sought the market on their own accord.\(^{31}\) The increase of cotters in the early modern period has also been linked to this.\(^{32}\) Studies dealing with specific economic activities have

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focused on the timber trade, fisheries or on mining. And these have most often been on the national or local level, exploring the sectors’ role in exports, in capital accumulation for the owner or the state’s attitudes towards them. Rarely has attention been given to the importance of participation for the households involved. The exception is in the mining sector and in studies of fisher/farmer communities along the north-western coast where some research has been conducted at the household level.

Studies of the secondary sector have tended to focus on the large scale, state initiated production units such as glass manufactories or mines. These studies have often been businesses histories focusing on a firm, or on the system of privileges connected to the early factories and large scale production units. The role of technological transfer and development has also been investigated, especially in the 1990’s. These studies have mostly been made from a Nordic or Danish-Norwegian perspective, or as a part of specific business histories. Studies made on technology transfer only to Norway have primarily concentrated on the period after ca 1820 and onwards.

Norwegian historiography has tended to give much attention to the state, and especially its structure, the networks and relations of power between the local, regional and national levels. In view of the historic relationship between Norway and Denmark it is not surprising that much of this has dealt with the relationship between institutions in Norway and Denmark, seeking to identify Norway’s position within the dual monarchy at different times. The State’s


policies toward production and consumption was primarily studied in the 1950’s and 1960’s by Danish historians focusing on fiscal and economic policy, as well as how mercantilism was practiced by the decision makers. These studies reveal that the Danish-Norwegian State in the 18th century developed conscious policies aimed at industrial development and productivity growth, as well as policies dealing with consumption. However, with a few exceptions, the focus has been on what the state did for the large scale manufactories rather than what was done for smaller, often household production units.

Despite the bleak picture, some work has been done on small production units. In a special edition of the Scandinavian Economic History Review of 1982, an attempt was made to discover if it was possible to identify proto-industrialisation in Norway. The article concluded that only a small fraction of the production was organised in accordance with Franklin Mendels’s criteria. Instead it was organised and took place in pluriactive artisan-farmer households. Furthermore, the products were rarely sold outside the region and few of these sectors or places became industrial areas during the industrial revolution. In the wake of the article’s conclusion, work on production in the early modern period was for many years put on hold in Norway. Nevertheless, the studies undertaken as part of the proto-industry discussion reveal that even though Norwegian industrial production did not fit with Mendels’s rigid criteria, widespread economic activity in the form of market oriented production had taken place.

In the mid 1990’s, as the debate about Jan De Vries’ industrious revolution commenced in Europe, early modern production once again received attention from Norwegian historians. Anna Tranberg and Knut Sprauten published their collection of articles dealing with peasants’
participation in market oriented activities, followed by a number of studies of production or economic activities in the period.\textsuperscript{40} In 2007 a special edition of the peer-reviewed journal \textit{Heimen} was dedicated to secondary sector production occurring as part of the farming household; dealing with brick production, brewing, textiles and ship building in the 18th and early 19th century.\textsuperscript{41} The finds in these studies correspond with many contemporary descriptions of the economic activity in peasant households.

Economic historians focusing on the 19th century have in recent years constructed consumer price series, GDP series and wage series for the early 19th century, some also stretching back to the 18th and 17th centuries. They indicate gradual growth in the period, interrupted by the Napoleonic war. Camilla Brautaset’s study of the Norwegian export trades between 1830 and 1860 also emphasised their crucial role in the economic development of the period.\textsuperscript{42}

If little attention has been given to production, even less has been given to consumption during the 18th century. One of the few works dealing with this is Stein Tveite’s article on the spread of foreign textiles in Norway, and in its wake, Berit Eldvik and Else Braut have studied the variation and spread of textile consumption in Norwegian communities.\textsuperscript{43} Even if these studies did not deal with a possible “consumer revolution”, their finds nevertheless indicate that consumption of luxury and consumer goods increased in the 18th century. Some research has also been done on the history of tobacco in Norway, revealing, amongst other things, that tobacco imports to Norway likely reached its maximum in 1761 with 611 701 pounds, which would approximate 1 pound of tobacco per person (smuggled tobacco not included).\textsuperscript{44} It has mainly been ethnologists who have studied change in early modern Norwegian consumption patterns, looking at, for example, building traditions, drinking


\textsuperscript{41} \textit{Heimen}, 01/2007.


culture and furniture. The actual systems by which goods were traded has been less studied. The most thorough research was conducted in 1952 by G. Tretteberg who mapped and described the trading routes both by land and sea and emphasised the role of seasonal fairs, peddlers and trades for the spread of products. The few preceding studies have confirmed her findings. Consumption is again receiving attention; in the autumn of 2009, the spread and trends of early modern consumption in Norway was the focus of a special edition Heimen, and a Nordic network has developed on the topic.

There have been few attempts at placing Norwegian production and consumption in the early modern period in an international or global perspective. Some studies have looked at Norway’s role in the Baltic trade in timber and timber products, but most of this was done in the 1950’s and 1960’s. Studies of the Danish/ Norwegian colonies and as well as of global trade has focused on the value and volume of the Asian trade as found in the auction documents, the cargo of the West-India trade and the trade with China. The role of the colonies is again receiving attention from Nordic historians, but it still remains to explore how the global trade impacted on domestic consumption and production in Norway.

1.5 The methods to be used

This thesis will alternate between the national, regional and household level of analysis, using entangled history methods to focus on how these were interlinked with each other. By using

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47 Heimen nr. 04/2009.; Handelshistorisk nätverken, based at Uppsala University.


entangled history methods this thesis aims to uncover interconnections and links between the micro-history study and national consumption and production, and the world market, as well as European trends in fashion and consumption.

Comparative methods will be used to place the Norwegian finds within a broader perspective. Comparative history is defined by Gerhard Haupt as differing from other historical methods in that it takes an explicit line of questioning to compare two or more cases stemming from different contexts. Its aim is either to bring out similarities and differences in the cases, or to determine the scope of scientific theory or theoretical approaches. We can also use comparison to find other positive explanatory factors for the phenomenon. The comparative method is useful for this project because it can help clarify what was unique, what was part of a general Norwegian trend, and what was shared with other European countries. But it may also be reductionist and there is the danger of isolating the focus of the study from its context. Using the entangled history method or approach, which focuses on interconnections can help avoid this. Entangled history emphasises the identification of links which communities or households for example, had with other places, institutions and actors at different analytical levels. This can help place the subject of study into a wider context, and helps show the changes over time, thus uncovering new understandings.

1.6 The sources; their possibilities and challenges

The thesis is based on a combination of primary and secondary sources dealing with changes in production and consumption at the national, regional and household level. The study of structural changes at a national and regional level mainly relies on secondary literature, supplemented by primary sources such as contemporary reports and records. Households’ resource allocation is analysed through the use of contemporary budgets, and their material wealth through probate inventories. In the study of changing consumption, contemporary

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topographic descriptions and customs records have been important, supplemented by studies of probate inventories. Ethnographic and art historic studies of items have similarly played an important role throughout this thesis, as have local history studies. Comparisons with other countries and communities will be continuous, but these rely on secondary literature.

The sources are discussed as they are used throughout the thesis, however an overview of the main primary sources and the challenges inherent in them is useful as a backdrop for the following discussions.

**Customs lists and legislative sources**

Unfortunately National compilations of the total Norwegian imports and exports have not survived. However customs lists covering imports and exports to many privileged Norwegian harbours have survived from at least 1750, and in some cases (like Christiania) from 1675.\(^{55}\) Unfortunately, even though most of the records were kept in the same way, some ports, most notably Bergen, diverge. Goods arriving from domestic ports (which included all ports in the Danish-Norwegian union) and those arriving from foreign ports were noted differently, making the compiling of complete historical import and export statistics a complicated task, and outside the scope of this thesis. Furthermore, the records only cover what was legally brought in and out of the country, and so do not cover the widespread smuggling which occurred along the Norwegian coast in the 18\(^{\text{th}}\) and early 19\(^{\text{th}}\) century. Despite this, the customs records make it possible to expand existing historical statistics dealing with imports and exports, and facilitate finding terms of trade for key exports like timber and fish, as well as important imports like grain, alcohol and goods like porcelain and cotton textiles. In some cases contemporary official studies concerning the imports of specific goods have survived, and have been used where relevant.

\(^{55}\) RA, Oslo, *Tollvesenets arkiver.*
Legislative sources in the form of laws and regulations have been used in order to identify changes in trade, as well as the formation of internal markets. These have been available in printed form in legislative collections.\textsuperscript{56}

\textit{National surveys and censuses}

Several surveys dealing with economic issues were carried out by the Danish-Norwegian and later the Norwegian government. One was the 1743 questionnaire. It was a national survey consisting of 43 questions sent to state officials in the Danish-Norwegian union. The questions dealt with issues related to daily life, language, local culture and resources. Not all officials were equally thorough when completing these questionnaires and their answers were often biased toward their own opinions and priorities. Nevertheless, the 1743 questionnaire provides, from its more comprehensive replies, useful first-hand accounts concerning diet, clothing, health, housing, naming traditions and cultural peculiarities in communities and regions. These replies have recently been transcribed and published in five volumes.\textsuperscript{57}

Other surveys, previously unused, are the industrial surveys, of which only the one made in 1776 has survived for the national level. The rest have survived patchily, and so it is not possible to make any complete overviews for the last decades of the 18\textsuperscript{th} century.\textsuperscript{58} The surveys took form as questionnaires sent out by the Chamber of Commerce, asking local authorities to provide the answers to a series of questions about the kind of industry, its ownership, the number of employees, the origins of the raw materials, and where the finished


\textsuperscript{58} RA, Oslo, Pk. 1567, 1577, \textit{Kommercekollegiet}, Industrisaker,. The industrial surveys cover the years; state in 1776, 1788-90, the end of the 1790s, 1805-06 and between 1808 and 1812, however the parishes they cover vary.
products were sold and so on. The answers often provide quantitative estimates of the size of production, and information on domestic trade networks and their international connections.

Starting with the 1825 compilations of the five-year reports from Amtmenn (head of regional administration), the medical reports of doctors from the 1850s, as well as contemporary analysis of these reports made by the statistician Brun Tvedt and the professor of Law A. Schweigaard make (often) comparable data available.\(^{59}\) In some instances it has been possible to combine the survey from 1776 with these later sources, enabling comparisons over time.

Also a regional survey in 1748 concerning the spread of guesthouses and guesthouses with trading privileges compared with a round of re-applications for guest house privileges in 1813 has been important in capturing the spread of rural retail outlets. Even if the lists can by no means be assumed to be complete, they nevertheless indicate patterns in the organisation of the retail system.

An often used source for this period is the population census of 1801.\(^{60}\) It varies in detail, especially in relation to livelihood and profession, however all members of the household were supposed to be registered. This makes it the first census of Norway, and one of the few existing early ones for Europe in which not only the heads of the household or the males were noted, but also the women and children. Since the census asked for the livelihood, social groups other than farmers were included, registering servants, cotters, artisans and the elderly. The census is unlikely to have noted travelling persons, such as tramps, or those drifting from one community to another. However as these only constituted a small share of the population the 1801-census can be taken as fairly accurate, at least for use in this project.


\(^{60}\) Digitalarkivet: 1801-cencus; http://digitalarkivet.uib.no/
Contemporary literature: treatises, topographic descriptions and statistical journals and publications

Contemporary treatises dealing with issues related to economic development have also been important. These were sometimes theoretical in nature, discussing issues such as if consumption was a good or an evil, or the importance of developing a factory system. Others were more practical, giving specific instructions on how to build things like tile factories or irrigation ducts. These works give unique insights into both the organisation, production, and sometimes also consumption, as well as how contemporary European debates were transferred and discussed in Norway. Authors like Andreas Bull, Chr. Pram and Hans Strøm have been central sources.

Topographic literature from the 18th century describing regions or communities have also been important sources. These were written by a state officials and clergies in the late 18th and early 19th century and were printed as individual books, or in journals such as Topographisk Journal published 1792-1807 or “Budstikken. Et ugeblad af Statistisk-Oekonomisk og historisk indhold” published 1817 -1825. The texts not only describe the local natural endowments, but also what was produced, and sometimes they also comment on the populations’ consumption patterns. These topographic accounts, as well as other contemporary literature, will also be used to supplement both the discussions of structural change at a national, as well as at the household level. These sources should be treated with care however, as they tend to illustrate pre-conceived perceptions of the rural population as conservative and resistant to change.


Newspapers also prove to be useful sources for discussion, as well as shedding light upon the availability of goods around the turn of the 19th century, and are a rarely used source in Norwegian historiography. Focusing especially on advertisements, this study has analysed through the Christiania based *Norske Intelligenz-Sedler* for the years 1763, 1773 and 1823 (the gaps are due to illegible microfilm and print), as well as first decades of *Bergens Adresse Contoir* printing, from 1777-1804. 64 Late 18th century Norwegian newspapers took the form of four page information leaflets, providing a mixture of adverts, announcements of weddings, probate inventories, lost and found notices, details of work, ships arriving or departing and often a short article or story which could vary from travel descriptions, poems or complaints of social issues.

**Price studies**

The changing prices of timber, fish and iron play a role in this thesis, however thus far no thorough price studies are available for Norway before the 1830s. 65 For the period 1830 to 1850 prices are only available for a small selection of goods, of which few have been relevant for this thesis. 67 For this reason Danish price series are used to capture changes in the principal goods produced and exported from Norway. 68 Danish prices cannot be assumed to be precisely the same as those in Norway, but since Denmark-Norway was part of the same customs union they were likely to be more akin than prices in other countries. Freight rates to Denmark were also lower than those for trade to warring countries in the late 18th century,

64 *Norske Intelligenz-Sedler* 1763, 1773, 1723, Christiania. made available electronically by the Norwegian National Library: Online: www.nb.no/avis.; *Bergens Adresse Contoir*, Bergen, 1777-1804.

65 If one were to compile such price series the best starting place would be the domkapitler and the priskuranter in rentekammeret. The former note the purchasing price paid by domkapitler, but the selection of goods may vary annually. The latter notes iron, timber, dairy and meat prices, but only for the respective port. Customs records for some of the ports may also be of help. Prices for other goods should be looked for in merchant and manufacturing archives.

66 A list of prices of Norwegian timber sold in London is available in Holmsen, A.: *Fra Linderud til Eidsvold vare*, bd. II-1, Oslo, Dreyers forlag, 1971, p. 258.; Sejersted, F. and A. Schou: *Fra Linderu til Eidsvol værk*, bd. II-2, Oslo, Dreyer Forlag, 1972, p. 32. Prices on several goods, amongst them fish, is found in graphs (of small size, and no tables) in Coldevin, A.: *Næringliv og priser i Nordland 1700-1880*, Jon Griegs trykkeri, Norway, 1938. For grain prices see Herstad, J.: *I helstatens grep. Kornmonopolet 1735-88*, Riksarkivaren skriftserie nr. 8, Tano Aschehoug, Oslo, 2000. As only Axle Coldevins work covers a wide selection of goods over a longer time period, and this only uses graphs to show trends and changes, it is not possible to use Norwegian price material in this thesis. (Searches have so far concluded that Coldevins price data has been lost).

67 I am grateful to Prof. Ola H. Grytten for giving me access to his price studies for the 18th and 19th century.

strengthening the argument for using Danish prices instead of those of London. Distance and transportation costs of course impacted on prices, but taking into account Norway’s geography, transport within Norway would often have been more difficult and costly than transport to or from Denmark. It should be emphasised that the price studies in this thesis only show general trends over time, and even if based on Norwegian prices, would not reflect the nominal price which a household received or paid for a given commodity.

When relative prices are discussed the nominal prices of the goods compared are used, but when the price trends of specific goods are focused upon, the prices have been adjusted to 1800 prices using Danish or Norwegian CPI calculations. These CPI’s are not ideal as they are based on back projections and estimates of data which in some cases may only be described as scant. Furthermore, the data is biased toward urban areas, which is not the focus of this study, and using CPI to describe the reality of households that were partly self sufficient is also not ideal. However, the CPIs can be used to help capture indications of change and trends of development.

Probate inventories

Probate inventories are an often used source for early modern consumption, but they are, however, riddled with problems of representativity and reliability. In Norway probate inventories were drawn up at death if there were minor heirs, or if the parents decided to transfer the estate to the children whilst some were still minors. The inventories covered the whole estate; thus if the deceased was married, the widow’s/widower’s valuables were also noted. The inventories listed the items, cash, letters of mortgage, real estate and other

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69 I am grateful to Knut Sprauten for the argument of freight rates from his unpublished Doctoral manuscript.
71 The first mention of probate inventories in Norway is from the 1620s. Inventories have survived for most of the country from the start of the 18th century, however these tend to concern the more wealthy deceased. Inventories increased in spread and social coverage from the mid 18th century, and especially after a law in 1768 which permitted the heir (including the widow) to accept the inheritance, without taking responsibility for any debt which was larger than the value of the estate.
valuables, as well as the gross and net values\textsuperscript{72} of the total wealth. In this way probate inventories only show the stock of what the deceased had acquired in terms of earthly goods in their life time. They do not reflect the flow of resources, and are thus unable to show how households allocated their resources. They can, however, be used to capture a glimpse of wealth and changes in material standards. A selection of inventories will be used for this purpose in chapters 4, 5 and 6.

There are nevertheless significant problems relating to representativity and reliability which must be kept in mind when using probate inventories. Representativity requires that the sources, in this case the probate inventories, are representative of the group being studied, in this case the rural Norwegian population. A common problem in studies using European probate inventories is that the wealthy are often overrepresented.\textsuperscript{73} This is less of an issue with Norwegian inventories since the law insisted on probate inventories being executed for all social groups. It was only in 1865 that a lower income limit was proposed, and even if it is not unusual to find only a few items, or even statements like “nothing of value” in 18\textsuperscript{th} century inventories, there nevertheless appears to have been a practice of leaving out the poorer part of the population.\textsuperscript{74}

With some variations over time, the Norwegian inventories have been estimated to have been conducted for between 15 and 20 percent of all deceased until the mid 19\textsuperscript{th} century. Most

\textsuperscript{72} A significant difficulty with English probate inventories is that real estate and money owed to other people was left out of the probate inventories. This makes it difficult, if not impossible to find out the deceased’s actual wealth and standing in a community. (Spufford, M.: “The limitations of the probate inventory”, in Spufford, M.: \textit{Figures in the landscape}, Ashgate, Aldershot, 2000). In this respect the Norwegian inventories are relatively informative, and make analysis of property ownership, as well as gross and net wealth possible, in some cases also studies of networks of debt. Unfortunately few such studies have been done using the Norwegian material.


were of persons between the ages 30 and 60.\textsuperscript{75} This is called “brukeralderen” (user age), meaning the age at which most of the users of farms belonged, and also the most productive and economically active age.\textsuperscript{76} This is unusual in a European context where the bias is weighted towards older people because the wealth bias requires the deceased to have had time to acquire their wealth.

It should also be kept in mind that probate inventories only reflect the material situation at the time of death. They say nothing about the person’s situation earlier in life, seasonal variations which may affect a household or material assets a person may have had available, such as rented animals or land, access to communal facilities such as baking ovens, or the possibility of borrowing necessities such as a horse and plough from a neighbour. Furthermore, the probate inventories provide no information about when items were acquired, if it was purchased or home-made, and, especially in the modest inventories, few or no details are noted about items other than the noun, sometimes with a generalized adjective like “old” or “new”. This makes it difficult to discover if a household followed consumer trends, or even the degree to which it relied on the market for consumer goods.\textsuperscript{77} That an item was noted shows that it was known in the community at some point prior to the inventory. But since small improvements were rarely noted, this is only used when mapping new trends involving novel items.

By reliability, it is meant that one must question if it is possible to trust that the inventory actually indicates what was in the property, and if the items were valued correctly. Studies of Norwegian probate inventories indicate that the probate courts expended much effort into finding and pricing all items. However, in some communities probate courts appear to have excluded the items necessary for the surviving family to be able to scrape a living. In this way

\textsuperscript{75} Probate inventories after older people would usually be private since they left grown and married children and therefore not recorded by the state. Inventories after younger people were usually also private since they usually did not have children yet.
it was ensured that the family did not descend into complete poverty, and thus be dependent on the community for alms. Unfortunately probate inventories begin to decline in accuracy, most often as a result of an increased “lumping together” of objects, as in the early decades of the 19th century, and in some instances as early as in the 1790s. There is nothing in the legislation to justify this, thus one has to examine other possible explanations. One is that officials grew lazy, but this cannot explain the general trend, which found all over the country. It is more plausible that as goods declined in value and their frequency rose due to rising availability, they were viewed as more and more common, making it less important to note each item specifically. Probate inventories had also become increasingly common, thus increasing the officials’ work load. The combination of there being more items, less value and more work not only explain the declining accuracy, but also indicates that households increasingly engaged in the market as consumers.

Chapter 2: Politics, Population and Production. Norway at the turn of the 19th century

Technology and specialisation are frequently used to explain the economic and structural changes occurring in leading pre-industrial countries. These enabled the economy not only to grow extensively, that is keep up with the population growth, but also intensively, that is; faster than the population growth; resulting in higher per capita incomes.\textsuperscript{79} The Industrial revolution in Europe was an example of how one such exponential growth took shape.

In Norway, technology and specialisation played lesser roles in economic development prior to the 20\textsuperscript{th} century. Studies of 19\textsuperscript{th} century economic development argue that the growth was export lead in the form of foreign demand for Norwegian produce such as timber, fish and shipping.\textsuperscript{80} These studies deal with the pre-industrial period only summarily, treating it as an inert society characterised by primary sectors and production for self sufficiency. This chapter, however, will show that for the last part of the 18\textsuperscript{th} century this was not the case. The economic and structural changes of the 19\textsuperscript{th} century were in fact continuations of trends and changes that had already begun in the 18\textsuperscript{th} century.

By looking at the economic and structural changes occurring in the production side of Norwegian society this chapter will discuss if and how economic development occurred in the decades around the turn of the 19\textsuperscript{th} century, and what impact this had on the spread of the industrial revolution and a modern market economy. This chapter will also function as a background for readers unfamiliar with pre-industrial Norwegian economic history. It will first give an overview of the political situation and demographic development, before discussing changes in the productive sectors of timber, fishing, mining, shipping and domestic industry. Imports and the financial system will also be discussed briefly.

\textsuperscript{79} Jones, E.: Growth reoccurring, Economic Change in World History, University of Michigan Press (2\textsuperscript{nd} Ed), 2000.

2.1 Politics

Political positioning in response to international occurrences played an important part in the highs, lows and general development of the Norwegian economy prior to the Industrial Revolution. From 1398 to 1814 Norway was one part of the dual monarchy Denmark-Norway consisting of Denmark, Norway, Iceland, Greenland, the Faroe Islands, the duchies of Sleswig and Holstein, and gradually from the mid 17th century also the West-Indian colonies St.Croix, St.Thomas and St. Jan, and the territories Tranquebar and Fredriksnagor (in Bengal) in India. Trade between the different parts of the dual monarchy had from 1733 been either free of customs or at least relatively low taxed. The state administration was centred in Copenhagen, and its main representation in Norway was in Christiania (today Oslo).

For most of the 18th century the Danish-Norwegian government held (as with most other European countries) a mercantilist economic policy. The underlying understanding behind this was the world economy as a zero sum, meaning that any money or resources spent on goods made by other countries were considered as a loss for the state. Policies were therefore aimed at developing domestic economic activities that would exploit the riches of others. They often took form as high customs, trade privileges or bans, and were primarily aimed at agriculture and other primary sectors. The Danish grain monopoly in Southern Norway between 1735 and 1788 and the Norwegian iron monopoly in Denmark between 1730 and 1794 are typical examples. Manufacturing was still small scale at the time, but received much of the same support as it was understood that processing had added economic value, increase knowledge, and, created employment. Also connected to this mercantilism was the idea that acquiring colonies and foreign territories could supply new resources and goods to meet domestic demands, as well as being sold to others to provide the state with profits.

During the European and world wars throughout the latter part of the 18th century, and early 19th century Denmark-Norway followed a policy of neutrality which made it possible for Denmark-Norway to trade with all the European powers. Thus, while potential competitors

were barred from many markets, Danish-Norwegian ships could trade with all, resulting in a boom in the Danish-Norwegian economy around the turn of the 19th century often called the “flourishing years”. Danish-Norwegian neutrality ensured safe passage for goods legally belonging to Danish or Norwegian interests, as well as for goods belonging to warring parties being transported under the protection of the Danebrog (the Danish-Norwegian flag). This neutrality enabled Copenhagen to become one of Europe’s premier centres for exotic goods, at least during the wars. Most of the exotic goods were re-exported, but manning ships, organising the trade and even the smuggling, created employment opportunities which helped boost Danish and Norwegian households’ resources and integrate them into the world economy. Sweden also followed this line of policy and trade, and like Copenhagen, Gothenburg also became a trading centre for European exotic goods.

Towards the end of the 18th century new ideas seeped into the economic policy which resulted in the removal of customs barriers and privileges. The 1797 customs law was the most marked of these, drastically reducing and even removing customs on foreign imports. That liberalization was the motivation for this is less certain. A. Rasch has argued that it was motivated more by the failure of the protectionist policies which had resulted in widespread smuggling, and thus a declining state income. The government also shifted its fiscal policies away from the deflationary line which had long hampered exports since it led to high prices. The new policy meant that Norwegian goods became more competitively priced abroad, and exports rose. When war broke out in Europe again in 1800 the demand for products supplied by Norway, such as fish and timber, as well as neutral ships to transport goods, rose. And so

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did profits in these sectors. The profits were thus “windfalls” which political manoeuvring managed to secure when international conditions were favorable. 86

These profitable times for the export sector lasted until Denmark-Norway was drawn into the Napoleonic war in 1807 on the French side. 87 Liberalization of trade was temporarily halted as the economy was geared toward war and the handling of the British blockade of Norway. These years also coincided with several failed harvests which deepened the hardship, especially in regions like Eastern Norway which depended upon the market when harvests failed. These years were less harsh along the coast where fish was available as supplementary nourishment.

Being on the losing side of the war meant that in the Kiel peace settlement of 14th January 1814 the Danish-Norwegian monarch was forced to cede Norway to Sweden, which it had requested in return for siding with Britain. During the following six months Norway declared its independence, established a parliament and constitution, and elected the recently abdicated Danish crown prince as King. After a short war with Sweden peace was made in Moss on 14th August 1814 in which the Norwegian government and king agreed on the terms of the Kiel treaty. Despite the military defeat Norway won politically, retaining a large degree of economic and political autonomy. It was agreed that Norway should keep its new constitution and parliament but accept a dual monarchy with Sweden. The King was to have two governments; one for Norway and one for Sweden. The Norwegian parliament and government were granted a wide jurisdiction over domestic matters, but the union was to have a common foreign policy.

After the Napoleonic war the Norwegian economy suffered a severe post-war economic depression that lasted for approximately a decade and a half. The break-up of the union with

Denmark meant the loss of access to the old dual monarchy’s market. With peace, competition in the European markets rose again, and combined with the increased protectionism in many countries and falling demand caused by post-war depression; Norwegian goods were pushed out of their former markets. Domestically, the Norwegian government was busy trying to stabilize an economy harassed not only by the general European depression and protectionism, but also one that was struggling as a new independent economy after the peace of 1814. It was not until the late 1820’s and early 1830’s when world trade grew again and liberalization opened up new markets that the Norwegian economy gradually began to pick up.

2.2 Population and social groups

Population growth is often used as an indicator of economic development since growth rates and life expectancy may point towards changes in living standards. Similarly, age and social structure can provide information about the economic potential of the labour force. From the early 18th century onwards the Norwegian population increased, growing with an annual rate of 0,38 percent between 1701 and 1750, and the same again between 1750 and 1801 (see table 2.1 and table 2.2). By 1855 the population had reached 1 490 000, a growth rate of 0,93 a year from 1801. As seen in table 2, most of the growth between 1801 and 1850 occurred after 1815, reflecting the hardship of the years during the Napoleonic war. The Norwegian growth rate was nevertheless much higher than the European growth rate of 0,15 percent between 1600 and 1750, and 0,63 percent from 1750 to 1850. Norway had long been primarily a rural country, only a small share of the population lived in urban areas; 10 percent in 1801, 10,8 percent in 1835, 12,2 percent in 1845 and 13,3 percent in 1855. Urban areas are here defined as settlements of more than 350 persons (the role of urbanisation is discussed more in chapter 3.4.4).

89 During the war years mortality was highest in Eastern Norway, and remained relatively unaffected in coastal areas. The possibility of replacing grain with fish in the latter areas is important in explaining this.
Table 2.1: Population 1750-1855 (in thousands).

<table>
<thead>
<tr>
<th>Year</th>
<th>1665</th>
<th>1701</th>
<th>1750</th>
<th>1769</th>
<th>1801</th>
<th>1815</th>
<th>1835</th>
<th>1845</th>
<th>1855</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>440</td>
<td>512</td>
<td>618</td>
<td>727</td>
<td>883</td>
<td>885</td>
<td>1 051</td>
<td>1 328</td>
<td>1 490</td>
</tr>
</tbody>
</table>


Table 2.2: Average percentage growth rate in Norway.

<table>
<thead>
<tr>
<th>Year</th>
<th>1701-50</th>
<th>1750-1801</th>
<th>1801-45</th>
<th>1845-55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate</td>
<td>0,38</td>
<td>0,38</td>
<td>0,93</td>
<td>1,16</td>
</tr>
</tbody>
</table>


Life expectancy rose between 1750 and 1850 indicating that living conditions also improved. In 1750 life expectancy was on average 35 years, but varied from between 30 and 45 depending on the region. Between 1821 and 1850 it had risen to 45 due to declining child mortality.92 Life expectancy rose in line with the general trends in Europe at the time.93

2.2.1 Social differentiation

Despite the population growth, the number of farmers did not rise correspondingly. Between 1665 and 1855 the number of farmers only doubled, whilst the population tripled (see table 2.1 and 2.3). Table 2.3 indicates that increased social diversification occurred during this period, however even if the understanding of farming remained relatively stagnant over time, other categories such as cotters, changed, making direct comparisons difficult.

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93 In neighbouring Sweden life expectancy was 37.3 in 1750-9, 36.5 in 1800-9 and 43.3 in 1850-9. In England it was respectively 36.9, 37.3 and 40.0. Norwegian life expectancy seems to have been somewhat higher than that of France where life expectancy was respectively 27.9, 33.9 and 39.8. Livi-Bacci. M.: (4. Ed) 2007, p. 109.
A study of the 1801 census indicates the same trend of social diversification. Landholders in Norway accounted for 45 percent of the adult male population. The other 24 percent were cotters with or without rights of cultivation, servants 11 percent, innerster (day labourers living on a farm) 4 percent, day labourers 3 percent and receivers of alms 2 percent (these groups are discussed in more detail below). Urban growth was not sufficient to employ the population without land and only a small share of the Norwegian population lived in urban areas. Instead increased social diversification in rural areas, as well as increased participation as producers for the world and domestic market explains how the remaining population made a living. Part of this occurred through changes to old institutions like the cotter system, others by the development of export industries and domestic manufacturing.

Table 2.3: Heads of households in the Norwegian rural population 1665 and 1855, sorted by profession/social status. Rounded numbers.

<table>
<thead>
<tr>
<th>1665</th>
<th>Share</th>
<th>1855</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>57 000 farmers</td>
<td>73</td>
<td>113 000 farmers</td>
<td>39</td>
</tr>
<tr>
<td>17 000 cotters</td>
<td>22</td>
<td>65 000 cotters with cultivation rights</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22 000 cotters without cultivation rights</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29 000 day labourers</td>
<td>10</td>
</tr>
<tr>
<td>4 000 kårfolk (“retired”)</td>
<td>5</td>
<td>37 000 kårfolk (retired)</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27 000 other professions</td>
<td>9</td>
</tr>
<tr>
<td>Total: 78 000</td>
<td></td>
<td>293 000</td>
<td></td>
</tr>
</tbody>
</table>


Farmers either owned their own land (selveier) or rented it (leilending) from another, often larger or urban based owner. Both groups were termed “bruker” (user) or “bonde” (farmer), and studies show that even though there were significant differences between them, compared

95 The contracts were for life and often inherited. The tenant could resign from the contract with due warning if he wished, but the land owner had no such option unless the tenant broke the terms of the contract.
to other social groups they were relatively similar. For this reason no distinction will be made in this thesis between these “brukere”, or farmers, unless it has specific relevance. Farmers’ households consisted on average of 5-7 persons, and were made up of the farmer, his wife, their children and some servants. To ensure labour resources, farming households would at times keep the children in the household into adulthood. Larger farm holdings would have more servants as these needed more labour resources.

A little used study by Lee Soltow of the distribution of real estate amongst Norwegian farmers in 1802 (see table 2.4) shows that the 10 percent of the farms with the highest value constituted 42 percent of the aggregate value (a Gini coefficient\textsuperscript{96} of inequality of .57). 14 percent of the farms constituted more than half of the aggregate value, which means that \textit{one of every seven farms was worth as much as the other six}. More than 60 percent were in the two lowest tax groups, indicating relative homogeneity between most. An average farm was valued at 350 rdl, while the median farm would be in the 150-299 tax class. Lee Soltow did not note in his article that there was a ceiling of 1200 rdl on the valuation of rural real estate, and twice the sum for real estate close to urban areas.\textsuperscript{97} However it is unlikely that this disrupts the general trend. Soltow’s comparisons showed that the distribution of real estate in Norway was relatively similar to that found at about the same time in Pennsylvania and Ohio where there was a great deal of cheap land and an absence of inheritance influences, and less than is believed to have been available in England where it is commonly assumed land was more concentrated.\textsuperscript{98}

\textsuperscript{96} The Gini coefficient is a measurement of statistical dispersion often used for inequality of income or wealth. 0 = full equality, 1 = full inequality.


\textsuperscript{98} Soltow, L.: 1978. Soltow’s study is based on a registry for the 1802 land tax consisting of six classes, divided according to farm value, spanning from 1 rdl to 1 000 rdl. The lowest group (1-149 rdl) is assumed to be under-registered. It was published in Norske Rigstidende 1. Jan. 1815. The 1802 land tax survey came in the wake of these regulations. For. 1. Oct. 1802: hvorved paabydes en aarlig Afgift af besiddelse, Nytte og Brug af faste Eiendomme I Norge, Finnmarken Fogderie undtaget…, Schou, J.H.: \textit{Forordninger}... (Possibly the wealth tax of 1798 could be used in a similar analysis (RA, Oslo, Rentekammeret, Forskjellige regnskaper.)).
Table 2.4: Distribution of real estate amongst Norwegian farmers in 1802. (Finnmark excepted)

<table>
<thead>
<tr>
<th>Class limit (in rdl)</th>
<th>Nr. of farms</th>
<th>Share of farms in classes</th>
<th>Assumed class midpoints</th>
<th>Estimated total value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 000 and over</td>
<td>5 744</td>
<td>7</td>
<td>1200</td>
<td>2 400 000</td>
</tr>
<tr>
<td>800-999</td>
<td>2 929</td>
<td>4</td>
<td>900</td>
<td>6 892 000</td>
</tr>
<tr>
<td>500-799</td>
<td>8 840</td>
<td>11</td>
<td>650</td>
<td>2 036 000</td>
</tr>
<tr>
<td>300-499</td>
<td>12 675</td>
<td>16</td>
<td>400</td>
<td>5 746 000</td>
</tr>
<tr>
<td>150-299</td>
<td>25 068</td>
<td>32</td>
<td>225</td>
<td>5 070 000</td>
</tr>
<tr>
<td>1-149</td>
<td>24 000</td>
<td>30</td>
<td>100</td>
<td>5 640 300</td>
</tr>
</tbody>
</table>


Cotters (husmenn) are perhaps one of the more thoroughly discussed, but still disagreed upon social groups in Norwegian historiography. There is, however, agreement that towards the end of the 18th century and in the 19th century institutional changes occurred which by 1855 had made cotters (with or without cultivation rights) the largest agricultural labour group (see table 2.3). Most cotters had, as part of their contract with a farmer, the use of a small plot of land and a house (or only the house), in return for a fee, but often working a prior agreed number of days for the farmer. It was through these contracted workdays that cotters made up the pool of agricultural labourers. The extent and the type of work varied between and within communities and regions, as well as over time in response to labour scarcity in the region. This is also reflected in differences in social status. The cotters’ contracts were for life and were often inherited, but both parties were free to quit the contract. The average size of a cotter household was 3-5 persons, and constituted the cotter, his wife and children, and possibly a servant or relative. The lower number of persons of the cotter households has been explained by the small out-put of the average cotter’s position. Employment opportunities as servants in farmers’ households or as day labourers also made it possible, or necessary, for the children to seek their independence at an early age.

Studies of fertility indicate that even though the marrying age for men in 1840 was on average between 28 and 30 and 26 to 28 for women, cotters tended to marry later than the often wealthier farmers. The average number of children for a Norwegian couple was four to five. Two local history studies indicate that the cotters delayed marriage age implied that they had a shorter reproductive span, and thus conceived fewer children. 100 Similarly, that farmers married earlier meant they had a longer reproductive span, and thus higher fertility. Having more children meant that the wealth had to be split into smaller parts, resulting in social decline over time, and that their children had to seek alternative employment. Further studies are needed to confirm these observations, however they coincide with Gregory Clark’s observations in England which indicate that over generations the rich impoverished themselves because of their higher fertility. 101

Even if farmers and cotters made up the largest share of the population in a Norwegian rural community, one can roughly identify four or five other groups. Table 5 shows that throughout the long 18th century they became increasingly widespread. Servants (dreng and pike) were frequently part of the farmers’ household. These were young, and usually unmarried people of both genders between the ages 15 and 30, and their work was generally perceived as an education; a way to learn skills and prepare them for working life as a farmer or cotter. They were often the children of cotters or poorer farmers. Day labourers were at the lower end of the social stratum. Some were specialised artisans, others more general labourers. Many migrated between seasonal employment in different regions and sectors. Somewhere between the servants and the day labourers were the lodgers (innerst). These rented a room, a corner or a bed, and were often artisans such as tailors or cobblers who would stay for a while, taking on work within a household or community. At the lowest end of the social strata were the poor individuals. These were often elderly or crippled with no family, or otherwise people who essentially had nothing. How many people were “poor” in this sense is difficult to

estimate since it is uncertain if all individuals were noted in censuses and other surveys. The 1801 census only notes approximately 18,000 persons as poor, or 2.2 percent of the population.

In addition there were “kårfolk”. These were usually old people, often the parents of the farmer or his wife, who had handed down their farms to the next generation, or in some other way paid to ensure their upkeep for their remaining years. Finally, two groups found in Norwegian rural communities were state officials and clergymen, as well as economic entrepreneurs such as local guesthouse keepers or rural shopkeepers and sometimes specialised artisans. Both groups numbered only few, and often made up the upper strata in a community. It should be mentioned that, contrary to most other countries, Norway had little or no nobility to speak of during this period. It has been argued instead that merchants and state officials played similar roles in communities as the aristocracy did in other European countries.

2.3 Production

That the productive activities of the pre-industrial Norwegian society was characterised by primary sectors and production for self sufficiency as Fritz Hodne has claimed, cannot, when looking closer at the main productive sectors, be said to provide a correct portrayal. A more adequate description would be that an increasing number of households in the late 18th and early 19th centuries engaged in production of processed goods with origins in the primary sector for the international market, or of manufactured consumer goods for the domestic market. Most of this production took place in rural areas, was seasonal, and combined with other productive activities requiring labour migration for parts of the year. As such households typically engaged in many activities; a way of organising production which will be called pluriactivity (flersyssleri). This next part looks closer at changes in the productive sectors; first agriculture, then what is often termed “the exporting sectors”, and finally in domestic manufacturing.

2.3.1 Agriculture

Agriculture was the largest economic sector, as well as the main livelihood for most Norwegian households. In the form of grain production and livestock, this was the basis for the rural Norwegian pluriactive households’ economic activity, ensuring their sustenance (food), if not being necessarily self-sufficient.

Only about 3 percent of Norway’s land was (and is) arable. The areas with the highest agricultural productivity relative to the population were found in eastern Norway, north of Trondheim, and in Jæren in Southern Norway, which all tended to focus on grain production, and in some cases also flax. Livestock was an integrated part of agriculture in all regions, but in places with less fertile soil such as the mountainous interior, or along the western coast, they were of greater importance than in the grain growing regions.

Table 2.5: Grain and potatoes sowed (utsæd) 1726-1855 (in 1000 barrels).

<table>
<thead>
<tr>
<th></th>
<th>1723</th>
<th>Normal year before 1809</th>
<th>1813</th>
<th>1835</th>
<th>1845</th>
<th>1855</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>269</td>
<td>397</td>
<td>438</td>
<td>(418)</td>
<td>518</td>
<td>595</td>
</tr>
<tr>
<td>Potato</td>
<td>-</td>
<td>53</td>
<td>69</td>
<td>(306)</td>
<td>458</td>
<td>556</td>
</tr>
</tbody>
</table>

*The 1835 estimates are bracketed since they are considered unreliable

Table 2.6: Land used for grain and potato growing 1723-1855 (in 1000 decar).

<table>
<thead>
<tr>
<th></th>
<th>1723</th>
<th>Normal year before 1809</th>
<th>1813</th>
<th>1835</th>
<th>1845</th>
<th>1855</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>807</td>
<td>1.191</td>
<td>1.314</td>
<td>(1.254)</td>
<td>1.554</td>
<td>1.785</td>
</tr>
<tr>
<td>Potato</td>
<td>-</td>
<td>25</td>
<td>32</td>
<td>(142)</td>
<td>213</td>
<td>259</td>
</tr>
<tr>
<td>Total</td>
<td>807</td>
<td>1.216</td>
<td>1.346</td>
<td>(1.396)</td>
<td>1.767</td>
<td>2.044</td>
</tr>
</tbody>
</table>

*The 1835 estimates are bracketed since they are generally considered unreliable
The Norwegian population growth noted in the previous section was supported by improvements in land use and increased production efficiency. The increase in planted grain (utsæd), the new plant potato, as well as expansion of agricultural land noted in tables 2.5 and 2.6 show that agricultural production increased through the period, a development termed by some as an “agricultural revolution”104. Most of the improvements utilised already existing technology such as communal grain storage facilities, irrigation, drainage, crop rotation and fertilising, and, some have argued, the spread of the potato.105 The potato’s role in the declining mortality has been discussed widely, and a general conclusion is that its low calorie content relative to volume made it less vital during the first half of the 19th century relative to other agricultural changes. Calculations of animal produce, as expressed in milk output, indicate relative stability from the 16th century onwards, rising slightly from the mid 18th century.106 That much of the agricultural growth began after the population boom coincides with Ester Boserup’s theory that population growth stimulates changes in agricultural methods.107

Norwegian domestic agricultural production was not sufficient to meet demand. Data on grain output is unavailable; making it impossible to find out how much of Norwegian grain consumption was covered by domestic production. Instead studies of grain imports combined in table 2.7 show there was a tendency towards increased dependence on imported grains after the mid 18th century.108 In contemporary budgets, discussed in chapter 4, the annual grain consumption of a household consisting of four adults and two children was about 21 barrels. When the per capita grain imports in table 2.7 are compared with this, it becomes clear that only 2-3 barrels of grain consumed by the household originated from outside Norway, or between 10 to 15 percent of the households annual grain consumption. This shows that on

average, during good grain years most of the grain consumed in Norway was in fact
domestically produced.

Table 2.7: Total imports of grain and food grains, to Norway, Southern and Northern,
represented in barrels per person 1672-1827.

<table>
<thead>
<tr>
<th></th>
<th>1672-99</th>
<th>1700-25</th>
<th>1730-40</th>
<th>1752-54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total imports of grain</td>
<td>0.7</td>
<td>0.3</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Food grain</td>
<td>0.7</td>
<td>0.3</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Norway total</td>
<td>0.7</td>
<td>0.3</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Northern</td>
<td>0.6</td>
<td>0.4</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Southern</td>
<td>0.8</td>
<td>0.3</td>
<td>0.5</td>
<td>0.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1762-69</th>
<th>1775-84</th>
<th>1794-1800</th>
<th>1821-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total imports of grain</td>
<td>0.7</td>
<td>0.5</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Food grain</td>
<td>0.7</td>
<td>0.5</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Norway total</td>
<td>0.7</td>
<td>0.5</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Northern</td>
<td>0.7</td>
<td>0.5</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Southern</td>
<td>0.5</td>
<td>0.5</td>
<td>0.9</td>
<td>0.6</td>
</tr>
</tbody>
</table>


In an attempt to ensure grain supplies to Norway, the Danish-Norwegian union between 1735
and 1788 imposed a grain monopoly. This gave the Danish a grain monopoly in Akershus stift
(East and Southern Norway) at regulated prices. It did not cover north western and northern
Norway (Bergen and Trondheim stift) which could purchase freely from the world market.
Grain prices fluctuated, but prices in Bergenhus and Trondheim were in general lower than in
Akerhus stift. Once adjusted for inflation using Grytten's CPI (see the discussion of this source
in chapter 1.6), prices, especially in Akershus and Trondheim stift rose (see figure 2.1) until
the late 1750’s, before declining and stabilising until inflation set in during the late 1790s and early 1800s. Lacking other Norwegian price series, it is not yet possible to find the relative price trend for grains against timber or fish. However, the declining, stable or relatively slow rising grain prices of the last decades of the 18th century indicates that households probably had more predictable expenditures on grain than in the decades prior to 1750.

Figure 2.1: Changing grain prices (average of rye, barley and oats) in Akershus, Bergenhus and Trondheim stift 1700-1804 (5 year averages, CPI adjusted), 1700=1.

Livestock and dairy production has received little attention by Norwegian historians. A small, local history study of the relative prices of grain and livestock in four communities with different geographies and proximities to urban markets shows almost a quadrupling of cattle prices, compared to oats and barley prices which only doubled. For example in Verdal-Stjørdal in Trøndelag one could purchase 1.6 barrels of barley for the price of a cow in 1700, while in 1850 one would get 3.6 barrels of barley. The difference in relative prices was largest

in the communities closest to urban markets since the sale of fresh dairy products increased the value of cows. These communities were also the first to take up new ideas concerning livestock production.

2.3.2 The export trades

Agriculture remained the main activity for most Norwegian pre-industrial households, but an increasing number engaged in pluriactivity by combining it with seasonal production and work in other, market oriented, productive activities. Many of these were within what is often termed “the export sectors”, which included the timber, fishing, mining and shipping sectors. Their importance is illustrated well by the fact that export duties made up about half of Norway’s share of the Danish-Norwegian state’s income through most of the long 18th century.110

Participation in these provided extra resources to pay for food, taxes, and with possibly a little something over for the hard times, or perhaps for comforts during the good times. The household’s labour resources were therefore flexible so long as the work could be combined in some way with agriculture.111 This was a problem for full time employment in manufacturing, but less so for engagement in the exporting sectors where work was seasonal. In practice the division of labour was often so that the men took on seasonal work outside the household, leaving the women in charge of much of the day-to-day running of the farm. The Lofot fisheries took place in February and the felling of trees similarly occurred in winter, both were thus possible to combine with agriculture. Not all sectors were so easily combined; sailors were away from home in the warm months, which coincided with sowing and harvesting, and those floating the timber were likewise away in spring. Also most of the coastal trading took place in the warm months.

111 This is also observed by e.g. Bull, I.: De trondhjemske handelshusene på 1700-tallet : slekt, hushold og forretning, Skriftrserie fra Historisk institutt nr. 26, Trondheim, 1998, p. 79-81.
The export sectors were vital for the Norwegian economy and estimates indicate they made up about 20-30 percent of total output between 1750 and 1850. Comparatively, Patrick O’Brien estimated that the ratio of domestic exports to gross national product was about 10 per cent in Britain, Portugal and Holland. A low estimate of the exports contribution to the Norwegian economy indicates that in 1805, one of the best years of the period, timber, constituted 4.5 million rdl, fish 2.7 million rdl, iron and copper 0.8 million rdl and freight shipping 2 million rdl. Even if most of this trade was controlled by a relatively small merchant elite, the active involvement of farmers, cotters and other groups in the population ensured that some of the profits were also shared among the wider population.

Studies of Norwegian economic development tend not to emphasise that much of the work within the exporting sectors was not merely the extracting of resources. This has lead to a misunderstanding that pre-industrial Norway was primarily a raw material exporting country. Attention should instead be called to the fact that most of the raw materials were processed into half, or even fully processed goods before they were exported. Deals (boards or planks), dried fish and iron bars are examples of this. Shipping should be understood as a tertiary sector providing transport services. As such, even if this production was not as advanced as the factories in London or Amsterdam in the long 18th century, it should still be understood as an early form of industrial production.

### 2.3.2a Timber

Norway was early a supplier of timber products to Europe, providing the construction materials for ships for trade, and buildings for the growing urban populations. In the 16th and 17th centuries the trade was concentrated along the southern and western coasts, but as these became de-forested, new areas, further inland, were gradually included. The expansion

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115 The fur, leather and hide trade frequently appears in the export records and likely played an important role as an additional income for many households. However, no studies have been made of it and thus little is known.
meant that more communities became involved in the gradually developing world market. Between 1688 and 1795 the exporting of timber was limited to a small number of privileged saws (700 in 1688) on which quantum restrictions also were imposed. Over time most of these saws came under control of urban merchants, while “bygdesager” (local saws) serving the local market did not. Profits from the timber trade did not only accumulate amongst the merchants, they also filtered down to the farmers owning the forests or the landless labourers and cotters who worked as lumberjacks or floaters. Some of these ended up in a dependency relationship to the timber merchants as they were paid in goods, or took out credit with security in future prices and deliveries.

Felling occurring in winter when the wood was easier to cut and snow made it possible to slide logs to waterways on which they were floated in late spring and early summer to the coast. Once at the coast the timber could be sold as logs or half-processed into beams, but more often it was processed by the saw mills to deals (planks/ boards) and battens before being shipped out. The latter were both manufactured products ready for use in construction of housing, wafts or other wooden works. As such the timber trade should not be seen as a merely raw material exporting sector, but one in which additional value was added through processing before being exported ready to use. The felling, floating and manufacturing work at the saw mill made the timber sector easy to combine with farming since the work happened when there was less to do in the agricultural sector, and was thus an ideal sector to engage pluriactively in.

Foreign demand for timber grew in the last decades of the 18th century; increasing by 90 000 cubic meters (30 000 last) between 1792 and 1806 (see table 2.8). Between 1776 and 1783 the annual average of exported lester of timber was 122 752. These estimates do not represent the smuggling of timber goods, and thus the amounts were likely to be higher than indicated

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117 Where the farmers were tenants on timber merchants land, they were required to work in his forests, and as he also supplied goods, frequently came in a relationship of debt to him.
118 It has been discussed to what extent the farmers were paid in cash which they could use freely, or if the merchant they traded with paid in goods such as grain or even agreements to pay the farmers taxes. This appears to have varied both between regions, merchants and over time. Bull, I.: “Borger og bonde i jord- og skogbruk. Godsdannelsel i Trøndelag på 1600- og 1700-tallet”, Heimen, nr 2/1993.
in the official records. Even if not all privileged saws had produced enough to fill their quota, the exports from all of them was still restricted by law until 1795. That exports rose from (see table 2.8) 150 000 lester in 1792-94, to more than 200 000 lester in 1804-6 indicates there had been significant potential for larger legal exports. The timber exports made Norway the second largest provider of fir timber, and the foremost of deals and battens to the British market during the second half of the 18th century, and the largest of deals between 1750 and 1770. The timber trade amounted to between one fourth and one third of the real value of Norwegian total exports.

Table 2.8: The Norwegian timber trade in lasts (1 lest = 3 cubic meters timber).

<table>
<thead>
<tr>
<th>Year</th>
<th>Foreign</th>
<th>Foreign and domestic</th>
<th>Year</th>
<th>Foreign</th>
<th>Foreign and domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1792</td>
<td>170 340</td>
<td></td>
<td>1800</td>
<td>188 187</td>
<td>214 038</td>
</tr>
<tr>
<td>1793</td>
<td>147 923</td>
<td></td>
<td>1801</td>
<td>155 855</td>
<td>186 492</td>
</tr>
<tr>
<td>1794</td>
<td>130 700</td>
<td></td>
<td>1802</td>
<td>193 525</td>
<td>230 249</td>
</tr>
<tr>
<td>1795</td>
<td>128 401</td>
<td></td>
<td>1803</td>
<td>226 244</td>
<td>264 000</td>
</tr>
<tr>
<td>1796</td>
<td>152 735</td>
<td>192 747</td>
<td>1804</td>
<td>188 224</td>
<td>225 687</td>
</tr>
<tr>
<td>1797</td>
<td>133 325</td>
<td>177 597</td>
<td>1805</td>
<td>208 948</td>
<td>244 923</td>
</tr>
<tr>
<td>1798</td>
<td>153 863</td>
<td>198 618</td>
<td>1806</td>
<td>209 524</td>
<td>239 300</td>
</tr>
<tr>
<td>1799</td>
<td>149 747</td>
<td>183 560</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Mykland, K.: 1978, p. 116. (by domestic is meant sales to other parts of the Danish-Norwegian union, of which most went to Denmark)

One “lest” is approximately three cubic meters timber.

The three previous Norwegian studies of timber prices in the 18th century have all limited themselves to about 1770 to 1806. The best of these covers only 14 of these years and uses the market prices in London, not those in Norway. These three studies have only looked at

nominal prices, observing that the prices rose and concluding that this enabled larger profits. Lacking a Norwegian price index, it is not yet possible to improve on these studies, however by using Danish prices (discussed in chapter 1.6) for Norwegian timber it is possible to get a better understanding of the development of prices in the timber sector. The prices have been adjusted to 1800 prices using the Danish CPI and the results are shown in figure 2.2.

Figure 2.2 shows that the general trend in timber prices between 1750 and 1800 fluctuated significantly. 12 alen single deals (planks/boards) remained relatively stable, while, 12 alen double deals declined. 10 alen deals increased somewhat in price from the mid 1770’s. The different price trends can be explained by changing international prices, and especially reflect the changing customs regimes in Britain, which was the main market for Norwegian timber goods. This coincides with the conclusions of former studies, even if these were only glimpses into the trends of nominal prices.

Figure 2.2: Danish prices of deals of timber 1750-1800. Adjusted to 1800 prices.

![Graph of Danish prices of deals of timber 1750-1800](image)

As the CPIs must be used with care (as discussed in chapter 1.6), a better indicator may be in the relative price of timber products to grain. Using Danish price series since Norwegian ones are unavailable, it is possible to gain at least an impression of this relationship. Looking at the changing price of 10 alen deals relative to barley, one of the more commonly consumed grains, figure 2.3 shows there were significant fluctuations between 1750 and 1770, after which the relative price stabilised somewhat at a lower level. The results must be understood only indicatively. Transportation costs would have raised the price of deals in Denmark compared to in Norway, and the price of grain has been shown by Jan Herstad to have been higher in Norway than in Denmark. The trend nevertheless indicates improved purchasing power for those engaged in the timber trade, which coincides with the price study above.

Figure 2.3: Relative price of a barrel of barley to 10 alen deals of timber. 1750-1800.
Danish prices.


Little technological development is known to have occurred on the saw mills during the last half of the 18th century. The “silke sagen” (“silk saw”) which used more saw blades being an exception. Instead it is changes in institutions and infrastructure which best explain the increased productivity demonstrated in table 2.8, of which the most significant organisational change was probably the gradual lifting of the restrictions on timber exports from 1795. The

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125 Herstad, J.: 2000
process was nevertheless slow. Until 1860 only privileged saw mills could export timber, and any profits were thus accumulated by the owners of these, usually merchants. The significance of developments in transportation infrastructure and trade laws around the turn of the 19th century is discussed in chapter 3.

The post-war years were hard for the Norwegian timber trade. Stagnation and decline in post war Europe had reduced the demand for timber and British protectionist policies favoured Canada, thus pushing Norwegian timber out of its main market. On top of this the Norwegian Parliament imposed a duty on exports which constituted 16 percent of the value of the timber trades between 1816 and 1830. Even if Norwegian timber found new markets on the continent, it still took a while for the sector to pick up. Domestic trade liberalisation between 1818 and 1860 opened up the market for new actors and product innovations which expanded possibilities, but of most importance was Britain’s gradual abandonment of the protectionist timber policies between 1842 and 1866. In doing so, Norwegian timber merchants could once again access their former main market and profit from its demand for timber.

Domestic demand for timber is difficult to estimate. Table 2.8 shows it was small compared to foreign demand. This estimate does not cover the many Norwegian households who owned forest land, and were therefore not dependant on the market for timber resources. It is more relevant to look at the spread of saws catering for the domestic market. The discussion later in this chapter, in 2.3.3, shows that saws for the domestic market were the largest of the domestic manufacturing units in the early 19th century, indicating that there was also much domestic demand for processed timber.

2.3.2b Fisheries

Fishing was another of Norway’s main economic sectors which households engaged in pluriactively. Like the timber sector, much of it occurred in rural areas and was easily

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combined with other activities. Between 1651 and 1866 the export fisheries made up between 51-67 percent of the total value of Norwegian exports, at times more significant than the timber sector. The fishing was concentrated along the western coast and the coast of Northern Norway, with Bergen and Trondheim as the main export ports. Both the catching and processing of the fish usually occurred in winter or parts of the year when there was little to do in agriculture. The fishing was usually organised by the individual farmer and larger farms would crew their boats with male family members, cotters and servants. The processing took place on land, and took form as various forms of drying and/or salting of the fish.

Stockfish was unsalted fish, especially cod, dried by sun and wind on wooden racks. Clipfish was salted fish, often cod, which was dried, usually on cliffs. Once processed in this way the fish, especially clipfish, could be stored for a long time, or eaten at once. The growing population increased the labour force, and workers were likely released to fishing from the struggling timber trade in the post war years.

The international demand for stockfish and clipfish rose throughout the 18th century in Europe. This was due to increased demand for cheap foods which could feed the growing urban populations, soldiers engaged in wars, the slave population in the West-Indies, and could also be eaten on catholic fasting days. As Spanish and British fishermen were barred from their fisheries because of warfare this helped increase the demand for fish from neutral Norway. By shifting the production from stockfish to clipfish, which kept longer, the Norwegian fish reached new and more distant markets.

Table 2.9: Norwegian export of herring and cod. Average for a selection of years 1756-1850.

<table>
<thead>
<tr>
<th>Time period</th>
<th>Herring (barrels)</th>
<th>Cod* (tons raw fish**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1720</td>
<td>10 000</td>
<td></td>
</tr>
<tr>
<td>1756-60</td>
<td>170 000</td>
<td>40 000</td>
</tr>
<tr>
<td>1804-06</td>
<td>50 000</td>
<td>73 000</td>
</tr>
<tr>
<td>1815-19</td>
<td>140 000</td>
<td>40 000</td>
</tr>
<tr>
<td>1846-50</td>
<td>620 000</td>
<td>105 000</td>
</tr>
</tbody>
</table>

*All sorts of cod, as well as saithe, ling and tusk.

** 3 kg raw fish per 1 kg clipfish, and 4.5 kg per kg stockfish.


The sector depended upon the availability of fish. Fish yields fluctuate, but in years of poor yields of one sort, it was possible to shift to another, or to improve organisation or technology to increase the catch. The spring herring fisheries had long supported economic growth in coastal Norway. From the 1730’s large investments were made on facilities to process the fish, that is salting (of herring) and drying (combined with salting of cod), and were implemented by Norwegian and foreign, mainly Scottish, traders. However, as table 2.9 shows, “black seas”, meaning the fish did not arrive, lead to declining herring yields in the last part of the 18th and early 19th century. Focus was shifted to cod. There was a spread of new technologies such as larger boats which enabled fishermen to go further from the shore, the shift from lines to fishing nets yielding larger catches, and the change from oars to sails increased speed. Thus productivity in fishing did not decline as much as it might have. The herrings returned in the 1820s, and utilizing the cod and the processing infrastructure that developed through the 18th century; a bonanza set in. Exports of stockfish rose by 60 percent and nearly 500 percent for clipfish between 1815 and the early 1840’s. This was helped by trade liberalisation opening up for new entrepreneurs, as well as the reduction of export tariffs in 1842.

Figure 2.4: Danish prices on iron, clipfish and bergfish 1750-1800. Adjusted to 1800 prices.

Nominal prices of fish rose towards the end of the 18th century, but when adjusted to 1800 prices (using the Danish CPI) figure 2.4 indicates the real price fluctuated, but followed a line of general decline. Thus, as in the timber trade profits from fishing came primarily through institutional and infrastructural development, as well as some technological change. The different interests and actors involved in the trade ensured that even if urban merchants controlled the foreign trade and also some of the processing, profits also benefitted the farmers owing and crewing the boats.132

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132 Hartviksen, B.: 2007, p. 6-12, 468-71.
Figure 2.5: Relative price of barley to clipfish and bergfish. 1750-1800. Danish prices.

As with the timber prices, the CPIs used to adjust the prices must be used with caution. A better indicator is fish prices relative to grain. Lacking a thorough Norwegian price series, it is possible to use Danish prices to gain some impression of the changes. Figure 2.5 shows that the relative price of clip fish and berg fish to barley fluctuated significantly, but that over time there was a small downward trend. This coincides with the price study in figure 2.4. However, one should bear in mind that, as with timber, the price of Norwegian fish in Denmark was likely to be higher than in Norway as transportation costs had to be incorporated, and similarly, the price of grain was higher in Norway than in Denmark. Further studies are needed of prices to identify the trends with more certainty.

Fish was also sold on the domestic market, in part to the urban areas which underwent population growth and increasingly depended on the market for food.\textsuperscript{133} It was also sold to inland communities, which despite inland fishing, still demanded saltwater fish. During the Napoleonic wars fish was crucial for coastal households as a substitute for grain and other

foods in short supply. This helped save coastal households from the famine suffered by inland Eastern Norway due to failed harvests and halted grain imports.

2.3.2c Mining

Mining and metal works was the smallest of the Norwegian export trades. It consisted of iron and copper mines and works, and employed 7000 persons in 1750, 2000 in 1815 and 5000 in 1840, after which employment numbers declined again. The mines and metal works were closed communities, having their own schools, churches and even laws. Several of the specialists were foreign, usually German. The works produced both copper and iron bars to be sold on the world market, and in Denmark where Norwegian iron had a monopoly as long as the price was less than 11 rdl per skippund (160 kg). The iron monopoly was active between 1730 and 1794. The owners were usually urban merchants. As the 18th century proved a relatively peaceful century for Denmark-Norway after the end of the Nordic war in 1720 the demand for cannons and arms declined and production at the works shifted to casting iron stoves, saw blades, ploughs, nails, and iron and copper pots and pans for the domestic market.134

Even if the mines and metal works employed few full-time workers, they did have economic implications for the surrounding population. Firewood and especially charcoal were essential fuels in 18th century manufacturing. To solve this, the mines were granted privileged access to the forests within a circumference of about 40 km. Farmers within this area were required to deliver firewood and coal in exchange for a fixed rate. This work fitted in well with other sectors as it was yet another potential pluriactivity for households.

Studies of the relationship between farmers and the works show no clear trends; some indicate that farmers were exploited and in several cases rebelled, while others show there could be

cooperation, at least from the last decades of the 18th century. Estimates indicate that mining and metal works consumed firewood and coal worth approximately 0.5 million rdl annually. Divided among the 10-20 000 farmers situated within the 40 km zones (called “circumference”), and with additional pay for transporting finished goods, this would have provided a reasonable additional income for a household. In some cases it may also have been at the expense of other activities, such as self sufficient grain production.

Towards the end of the 18th century the Norwegian metal works and mines show diverging developments. Copper was mined at five works in Mid-Norway, of which Røros dominated. Production reached its maximum in 1780. But in the following decades world copper prices remained high, ensuring profits were still made despite falling output. Norwegian iron was mined mainly in coastal areas in the East and South and there were about 15 works operational throughout the 18th century. The size of the production has been discussed, and Ingeborg Floystad’s calculations indicate a tripling of the production of pig iron from about 3200 tons a year in the 1720s, to 6000 tons around 1760 and 9000 tons after 1800. Danish prices, once CPI adjusted, show a gradual decline throughout the period indicating, the opposite trend of world prices which were gradually rising. The production growth nevertheless ensured profits for the owners. At the start of the 19th century there were three copper works and 20 iron works in Norway, all running with profits due to the large European demand. With the end of the Danish-Norwegian union, Norwegian iron lost its privileged access to the Danish market. Britain and Sweden shifted to more modern iron smelting techniques and as the old technology was still being used in Norway, Norwegian iron works were unable to compete. The copper works continued to struggle, but prices did not fall as far as they had for iron. The decline nevertheless heralded the end of the Norwegian mining and metal works.

2.3.2d Shipping

The shipping sector was closely linked to the other export trades as it earned its profits by freighting their produce. As the profits of the timber merchants rose, they began investing in ships to carry the timber to England. The ships travelled in the calm, warm months and the sector was concentrated along the shore of Southern and Eastern Norway, recruiting young men both locally and amongst inland people who migrated to the coast for work. In the winter months many combined this with work in ship yards or the timber trade, making sailing yet another possible pluriactivity.139

Towards the end of the 18th century the Norwegian shipping sector also operated independently; for example taking on contracts to freight for other states in the Mediterranean and, gradually, shipping was expanded to an all-year trade. The neutrality policy allowed Norwegian ships to trade in most ports, and to be used by warring countries to transport goods. This also drove freight prices up, and increased profits for the ship owners.140 It was also crucial for inter-regional trade within Norway, between the Danish-Norwegian regions, and later in the Swedish-Norwegian union. Carrying goods between regions ensured improved supplies and gradually brought about a more integrated internal market (as will be discussed more in chapter 3).

Ship building also increased during the 18th century (see table 2.10). In 1746, 46 percent of the Norwegian tonnage was built in Norway, by 1777 it had increased to 87 percent. The share of Norwegian-built ships remained relatively constant until 1806. The close ties to the timber sector meant that as the timber trade went into decline after the war, so did the shipping sector. Freighting Norwegian fish exports helped, but the sector continued to struggle. The general European economic slowdown and increased protectionism meant there was little opportunity to freight for foreigners. The Norwegian ships also lagged behind

140 Hodne, F. and O.H. Grytten: 2000, p. 25. There is an ongoing research project on the Norwegian shipping sector. Parts of it covers the last part of the 18th century. For more information: http://www.hf.uio.no/ikh/forskning/forskningsprosjekter/skipsfart/om_prosjektet.html

Hutchison, Ragnhild (2010), In the Doorway to Development: An enquiry into market oriented structural changes in Norway ca. 1750-1830
European University Institute
DOI: 10.2870/19493
technologically, and so were less competitive with regard to swift deliveries. All this reduced the freight rates of Norwegian ships, making the sector less profitable.\textsuperscript{141}

### Table 2.10: The Norwegian fleet 1746-1815 (Number of ships and tonnage).

<table>
<thead>
<tr>
<th>Year</th>
<th>Nr of ships</th>
<th>Net tons in 1000</th>
<th>Year</th>
<th>Nr of ships</th>
<th>Net tons in 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1746</td>
<td>506</td>
<td>49,6</td>
<td>1800</td>
<td>1156</td>
<td>120,8</td>
</tr>
<tr>
<td>1767</td>
<td>594</td>
<td>52,8</td>
<td>1802</td>
<td>1079</td>
<td>112,8</td>
</tr>
<tr>
<td>1776</td>
<td>546</td>
<td>50,6</td>
<td>1804</td>
<td>1366</td>
<td>144,5</td>
</tr>
<tr>
<td>1781</td>
<td>735</td>
<td>72,0</td>
<td>1806</td>
<td>1616</td>
<td>155,9</td>
</tr>
<tr>
<td>1786</td>
<td>817</td>
<td>98,0</td>
<td>1807</td>
<td>1416</td>
<td>121,2</td>
</tr>
<tr>
<td>1792</td>
<td>860</td>
<td>94,7</td>
<td>1809</td>
<td>1313</td>
<td>112,9</td>
</tr>
<tr>
<td>1795</td>
<td>880</td>
<td>97,6</td>
<td>1815</td>
<td>1673</td>
<td>147,8</td>
</tr>
</tbody>
</table>


Conditions changed in the shipping sector from the mid 1820s. The removal of trade barriers between Norway and Sweden opened the Swedish market for Norwegian freighting, but also for transporting Swedish goods (especially timber) for export. Short of rebuilding all, little could be done to improve the speed of the Norwegian fleet. However, speed was secondary when transporting timber, and so the Norwegian fleets specialising on timber could compete on price. Competitiveness was further enhanced by reduction of crew size. In this way the Norwegian fleet was competing while using second best technology. When the Norwegian timber trade began to grow again from the mid 1830s, the shipping sector was boosted, making it possible to increase the fleet by 150 percent between 1825 and 1850, and the crews by 170 percent.\textsuperscript{142}


\textsuperscript{142} Ibid.
2.3.3 Pre-industrial manufacturing

Studies of the pre-industrial period tend to emphasise the importance of the factory system for economic and social development. The new technology which the machines and organisation employed enabled more efficient production, allowing lower prices and larger output of goods which could be sold to a mass market. The work was specialised, requiring the focus of households labour resources, and took place either in factories, manufactories, but also in the home. The latter has been variously described as outwork, vorlag or cottage industry, and was linked to producing for a capitalist. The developments took place in a wide range of industrial sectors, of which many were directly or indirectly connected to supplying consumers with durable, semi-durable and perishable goods in accordance to new trends. The spread of knowledge throughout the population was also central to the process.143

Ever so gradually the beginnings of a manufacturing sector grew in Norway from the middle to the end of the 18th century onwards. This section will argue that even though the early modern industrial development in Norway followed some of the same trends as those found in the economic leaders there were significant differences in how the production was organised. This was because for most of the households involved in the early modern industrial production, it was yet another pluriactivity. From here on the term household manufacturing will be used instead of cottage or vorlag industry as such producers in rural Norway generally controlled their own production. The implication of manufacturing on price and availability of durable, semi-durable goods will be discussed in chapter 5.2.

It should be noted that to term the products of the Norwegian early industry “consumer goods” (in the modern sense) is not wholly correct. Consumer goods are typically described as final goods made for a mass market, but as chapter 3 will show, this was not yet developed in pre-industrial Norway for most goods, the exception being tobacco and sugar (discussed in chapter 6). For this reason the study still considers the produce as final goods, but its character

as mass market goods is secondary. Instead is considered satisfactory that it was sold on the market.

Little attention has been given to pre-industrial manufacturing in Norwegian historiography. Previously such production has often been treated more as curiosities than as indicators of economic activity. This is presently changing as new eyes have begun looking more closely at this area, especially rural productive activities. The following discussion uses sources currently unused or little used, contributing new quantitative and qualitative information about changes in the variety of sectors and their spread.

2.2.3a Changing sort and spread of manufacturing

Manufacturing both in factories and in households was viewed with approval by the contemporary authorities. It was argued that it both reduced dependence on imports and created employment. Several attempts were made at stimulating manufacturing using privileges or prizes for productivity, as well as state-initiated education projects for example improved linen or tar production. Even though several of these projects appear to have had some success, their scope was nevertheless limited as most of the manufacturing taking place was not part of such programmes.\(^{144}\)

Little quantitative data exists on the spread of the production of durable, semi-durable and perishable consumer goods in Norway. A recently discovered and hereunto unused factory survey made in 1776 offers a new glimpse into the sort of production which existed. The “factory” survey from 1776 (summarised in 2.11) mapped all those productive activities which contemporaries perceived as industry, including everything from mines and metal works, to large scale manufactories, household manufacturing and artisan workshops. When compared with a factory survey made in 1835 (see table 2.12) it is possible also to identify

changes and even trends over time. The two surveys are not directly compatible because of the disparities of the entries, but they can still help capture developments in pre-industrial Norwegian manufacturing.

The 1776 survey attempted to map the number of factories, their ownership, number of workers, origins of the raw materials, and where the final goods were sold.\textsuperscript{145} Reflecting the difficulties in collecting the material, information is often lacking or approximate. Also state officials did not always do a thorough job when collecting the information. For this reason the survey from 1776 should be considered only as indicating minimum activity in the early modern manufacturing sector. The 1835 survey is less detailed, but was part of a state apparatus which had become somewhat more institutionalised. It was based on reports from \textit{amtmenn}, regional state officials, and can be considered somewhat more precise with regard to coverage, even if it is not clear how it related to seasonal production.\textsuperscript{146}

The 1835 survey is not directly compatible with the 1776 survey as some of the definitions appear to have been altered. Examples of such are production units in the textile sector, changing names to include a wider scope of production, or like copper and iron works which were no longer considered “factories” and therefore not noted. In neither of the surveys was ship building included, and so a significant manufacturing trade along the coast of southern and western Norway was omitted. The information provided in both is thus only indicative of the minimum spread.

\textsuperscript{145} RA, Oslo, Kommerciekollegiet, Norske saker, Industrisaker pakke, General tabell over Fabrikkerne i Norge 1776.

\textsuperscript{146} Amtmannsberetningene: \textit{Beretninger om den Oeconomiske Tilstand m.m. i Norge ved udgangen af Aaret 1835, underdanigst afgivne af Rigets Amtmænd}, Christiania 1836, Table 14: over de vigtigste Industrie-Anlæg, som foruden Bergverkerne haves i Norge ved Udgangen af Aaret 1835.
Table 2.11: Summary of “factories” registered in the 1776 factory survey.

<table>
<thead>
<tr>
<th>Factory</th>
<th>Number</th>
<th>Nr employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum works</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Bark mills (for tanning)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chalk burners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal burners</td>
<td>1</td>
<td>120</td>
</tr>
<tr>
<td>Copper works</td>
<td>4</td>
<td>987</td>
</tr>
<tr>
<td>Dye mill (furnace?)</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Fulling mill</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Grain mill and sift</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Gun powder mill</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Iron works</td>
<td>11</td>
<td>329</td>
</tr>
<tr>
<td>Linen cloth factory</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Plain weave and cotton printer</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Mines</td>
<td>5</td>
<td>10,5</td>
</tr>
<tr>
<td>Nail works</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Oil and soapmill</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Paper mill</td>
<td>3</td>
<td>80</td>
</tr>
<tr>
<td>Pipe factory</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Porcelain factory (“fake”)</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Potash factory</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Privileged saws</td>
<td>298</td>
<td>605</td>
</tr>
<tr>
<td>Ropemakers</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>Saltpetre factory</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Spinning mill</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>Starch and powder factory</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sugar refinery</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>Tar burning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tile and brick works on farms</td>
<td>41</td>
<td>156,5</td>
</tr>
<tr>
<td>Tobacco factory</td>
<td>21</td>
<td>335</td>
</tr>
<tr>
<td>Woollen cloth factory</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>444</strong></td>
<td><strong>2350,5</strong></td>
</tr>
</tbody>
</table>

Source: RA, Oslo, Kommerciekollegiet, Norske saker, Industrisaker, General tabell over Fabrikerne i Norge 1776. (A complete version can be procured from the author (electronic) or in original from the archive.)
Table 2.12 Factories in 1835.

<table>
<thead>
<tr>
<th>Factory</th>
<th>Total</th>
<th>In urban areas</th>
<th>In rural areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer breweries</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Card (karde) factory</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Chicory factories</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chocolate factories</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chrome works</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Cloth factory (klede)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Copper works (koppervalseverk)</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Cotton spinning mills and weaving</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Glass works</td>
<td>8</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Gunpowder mills</td>
<td>5</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Malt factories</td>
<td>61</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td>Nail factory</td>
<td>6*</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Oil mills</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Ornament factory</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Paper mill</td>
<td>8</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Playing card factory</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Pottery</td>
<td>11</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Rope maker</td>
<td>29</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Salt refinery</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Salt works</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Saltpetre works</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Saw mills</td>
<td>3398</td>
<td>68</td>
<td>3330</td>
</tr>
<tr>
<td>Small nails factory</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Soap factory</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Spirit distilling</td>
<td>366</td>
<td>252</td>
<td>114</td>
</tr>
<tr>
<td>Steel wire factory</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Sugar refinery</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Tile factory</td>
<td>193</td>
<td>4</td>
<td>189</td>
</tr>
<tr>
<td>Tobacco mill</td>
<td>79</td>
<td>78</td>
<td>1</td>
</tr>
<tr>
<td>Varnish factories</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Vitrol and brown-red factory (dyes)</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Wagon factory</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Weapons factory</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4214</td>
<td>489</td>
<td>3730</td>
</tr>
</tbody>
</table>

*the iron works also had 50 nail hammers. Source: Amtmannsberetningene: Table 14: 1836.
Full time, specialized manufacturing

Only a small number of the sectors produced goods full time and year round. These were often linked to the developing trends connected with exotic goods and new ideals for which there was a mass market (discussed more in chapter 6), or to the poor relief system. Exotic goods, especially tobacco, experienced a significant growth in manufacturing units. Most of these units were located in, or close to, towns, and usually owned by merchants. Their market was the Norwegian mass market, and in some cases also neighbouring areas in Sweden.

All in all, the 1776 survey reported that tobacco mills employed at least 291 persons and had a combined production of at least 390,000 pounds (approx. 200,000 kg). This is likely to be an underestimation, as a registration of privileged tobacco traders in 1778 noted 140 citizens engaged in both tobacco manufacturing and trade, and as many as 1021 in trade. Most of these were small scale traders and producers for whom the activity constituted an additional income. By 1835 the number of tobacco mills was down to 79. This was likely because of consolidations within the sector as approximately 15 were large and modern factories which dominated the market. The rest were still small scale, and even included household manufacturing.147

Another full time manufacturing activity was the privileged sugar refineries. The first were established in the 1750’s in Bergen, Fredrikshald (Halden) and Trondheim. The production required large sums of capital invested into tools, raw materials and buildings, and so the owners were merchants or partnerships. In the 18th century the refineries were supplied through the internal market with sugar from the Danish-Norwegian West Indies. They competed with the Danish refineries, but most had failed by the mid 1790s when the privileged access to the Norwegian market ended, and they were out-competed by Danish sugars. The end of the Danish-Norwegian customs union in 1814 rised the prices of Danish sugar in Norway. The new situation opened up the opportunity to establish new Norwegian

sugar refineries which from the mid 1830’s acquired the molasses from the increasingly liberalized world market. A chicory factory was also noted in the 1835 survey. Chicory was used as coffee surrogate, and its presence shows that demand for coffee was sufficient to make also cheaper substitutes profitable. The glass works at Hadeland, which for unknown reasons were not noted in the 1776 survey despite being established in 1762, similarly indicate a demand for mass produced refined goods in addition to metal or wood.

Textile factories were also full time and specialist production units were noted in both surveys. In the 18th century their establishment was in part motivated by limiting the imports of foreign textiles. They were also often part of the poor relief system and used to provide work and teach new skills to this group. Few, if any of the 18th century textile manufactories made any economic profits, but their role in developing human capital and spreading knowledge of textile production should not be underestimated. In the 19th century textile mills were established based on knowledge and experiences learned at some of these factories. Also the understanding of the importance of technology and knowledge for efficient production led to imports of technological packages from Britain, and these were run by private entrepreneurs who tried to profit from domestic demand for textiles.

Smaller production units also produced full time, but these tended to be organized as artisan production, sometimes also in guilds. Amongst these were e.g. dyers. New trends and ideals of refinement (discussed more in chapter 5 and 6) were also apparent in this sort of production. The increase in oil and soap mills reflects new ideals promoting cleanliness of the person, his or her clothes and the house, but also the wish and ability to purchase perhaps finer and better scented soaps than those one could make at home. The porcelain factory and potteries mentioned above indicate the same, and the appearance of factories making playing cards.  

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cards, ornaments and similar items in the 1835 survey show that a demand for goods linked to leisure was growing.

Manufacturing of accessories connected to exotic goods and other consumer trends consumption also sprung up. Jacob Boys tobacco pipe factory in Drammen in 1759\(^{151}\) is an example of this, as were the two tobacco pipe makers in Akershus stift (diocese).\(^{152}\) Also a “fake porcelain” factory, likely a stoneware factory, was noted in the 1776 survey. It obtained its clay from Flensburg and sold its products to the local regions and towns. The factory appears to have tried to produce domestic substitutes for porcelain goods. Most likely these were in clay and more like stoneware. The factory reported that its sales were hindered by imports. In the 1835 survey 11 potteries were noted. These mainly made stoneware and pottery, and several were probably located in Trøndelag as this region developed a pottery industry.\(^{153}\)

*Seasonal and part-time manufacturing*

Most of the manufacturing in Norway around the turn of the 19\(^{th}\) century was nevertheless combined as a pluriactivity with agricultural and other production in some way. This form of production is here termed “household manufacturing”. They were seasonal, part-time or both, located in rural areas, often on a farm and owned by a farmer. They catered to growing demand for goods linked to new trends in comfort and respectability (discussed in chapter 5 and 6) in their local areas, sometimes also other regions. The factory surveys provide some information, as do contemporary topographic descriptions and studies of economic activities. Unfortunately the latter two provide little quantitative information.\(^{154}\) Mapping household’s

\(^{151}\) (For whom a national import ban on foreign pipes was declared in 1759 to protect his production. The condition was that there always should be enough pipes to meet the demand). Plac.: 16.1.1759 Placat ang. forbud paa Fremmede Tobaks-Pibers innførsel til Norge, in *FOAa*

\(^{152}\) RA, Oslo, Kommercekollegiet, Norske Saker, Industrisaker, pakke, General tabell over Fabrikerne i Norge 1776.


manufacturing has proven difficult, as the factory surveys cannot be assumed to cover all these and the other reports are haphazard both in their regional coverage and in their detail.\textsuperscript{155} Some trends are nevertheless identifiable.

Tile and brick production was a typical example of household manufacturing. Those noted in the 1776 survey were farmer-owned and the market was nearby communities. Production depended on warm temperatures, and work was thus undertaken in summer or late autumn when there were calm periods in agriculture. The size of production varied; the largest produced 150 000 tiles and bricks annually, while the small works produced only a couple of thousand or when there was a particular demand. The tiles and brick sector grew fast, becoming the third largest in 1835, after sawmills and distilleries, its growth continuing through most of the 19\textsuperscript{th} century. Several of the tile and brick factories of the late 19\textsuperscript{th} century were located in the same places, or close to where there had been tile and brick manufacturing in the 18\textsuperscript{th} and early 19\textsuperscript{th} century. In part this was because of access to clay resources, but it also indicates a transfer of knowledge and entrepreneurial experiences. The increase in tile and brick production can be partly explained by urbanization and industrialization, but since this did not really take off in Norway until the second half of the 19\textsuperscript{th} century it is not a satisfactory explanation. One must instead look to the importance of the internal market development and new trends in housing, both of which are discussed in following chapters (chapters 3 and 5), as these enabled both the spread and created the demand for the goods.\textsuperscript{156}

Sawmills were another seasonal manufacturing sector. They depended on sufficient water in rivers or waterfalls, and so production was limited to the warm months in larger rivers, or spring melt in smaller waterways. The sawmills should be seen in context with the timber


trade discussed earlier. The sawmills registered in 1776 and 1835 are unfortunately not directly comparable. The 298 sawmills registered in 1776 only include privileged sawmills, not “farmers’s sawmills” which catered for the domestic market. In 1835 the number of sawmills registered had risen to 3398. The rise occurred despite the timber exports struggling. It is probably best explained partly by a gradual increase in privileged saws in the 18th century, but most importantly by a law in 1818 which allowed forest owners to cut and export freely, stimulating an increase in sawmills. These mills could also sell to the domestic market, thus their existence indicates that, combined, there must have been sufficient demand. It also indicates that the owners of mills catering for domestic demand in the 18th century had acquired sufficient knowledge and experience to expand their production to the international market in the 19th century.

Alcoholic drink production appears in the 1835 survey as one of the larger sectors. The 366 distilleries indicate a large domestic demand, as do the 9 beer breweries and 61 malt factories. Spirit distilling from grain was an attractive pluriactivity for farms in grain growing areas as it gave larger profits than the sale of grain. That no such production was noted in 1776 is partly explained by beer brewing being part of the households self sufficient production, but also by the national prohibition on distilling imposed between 1757 and 1816 which made it unwise for producers to allow their activities become public knowledge. The illegal spirit distilling of the 18th century appears nevertheless to have provided farmers and producers with sufficient knowledge and competence to enable the sector to become one of the largest in Norway within 15-20 years of the ban being lifted.

Other household manufacturing activities described in the contemporary studies and descriptions draw a picture of widely varied production. This ranged from pre-fabricated housing (made in Lindås close to Bergen, Klæbu near Trondheim and Feda close to Mandal and sold to mainly the urban areas), to tar production in forested areas, supposedly exquisite gloves in Verdalsøra, ladies’ hats in Eiker and in Toten, pyramid shaped boxes with drawers in Jarlsberg, shoes and other leatherwork, tailoring, spinning, weaving and knitting, carpentry

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and metal workings, basket weaving, button making, various sorts of wooden boxes and spoons, and boat and ship building all along the coast. The markets for these goods varied from the local community, neighbouring communities, the wider region, but also between regions as distant as Northern and Eastern Norway and to other countries. The production could be seasonal, needing most work at times when there was little to do in agriculture, such as tar production which could be done in the quieter months of summer. Others were done simultaneously with other activities, such as knitting while walking or riding, or when shepherding. Many were also done in the evenings, when farmwork or work in the forest or in fishing was done.

**Picture 2.1: Peasant girl from Hedemarken knitting.**


Both men and women took part in household manufacturing, but what they produced tended to be different. Generally men produced wooden and metal goods, women worked with textiles (as in Picture 2.1), but the gender division of labour was not absolute. In cases where

Hutchison, Ragnhild (2010), *In the Doorway to Development: An enquiry into market oriented structural changes in Norway ca. 1750-1830* European University Institute  DOI: 10.2870/19493
the majority of the household’s income came from household manufacturing, it was not unusual that the whole household took part, as occurred in cotter households in Hedemarke

which specialized in spoon or box making. 159 Similarly, in cases where one gender’s production brought in a significant share of the income, several examples show that households re-allocated its labour resources to support this. 160 An often used example is that men in Overhalla (in Trøndelag) took over the traditionally female responsibility for the animals to free the women to spin and weave. 161 This is the same flexibility as when women did the traditional men’s work on the farm when the men were away fishing, or worked in the forest or at sea.

2.3.3b Changing scale and geographical concentration

The wide variety of productive activities, both of full time factories and especially household manufacturing was clear, but is it possible to discover how large a share of the population was involved in manufacturing of durable, semi-durables and perishable goods? Unfortunately the information provided concerning the number of workers in the 1776 survey (see table 2.11) is very approximate. In some cases, the numbers are precise, but in many they are just estimates or there are no numbers noted at all. It is also unclear if the workers noted were full time, seasonal labour or workers organised in “putting out” systems, or a mix of both. It does not help that many of the trades, like sawmills and tile works, were seasonal, while others, such as tobacco and textile manufactories were part of the poverty relief system, or like beer brewing had been undertaken in the household for its own consumption. Keeping this in mind, the 1776 survey noted 2350 162 persons employed. Compared to the total population of 727 000 in 1769, this maked the domestic manufacturing sector only 0.3 percent of the population. No numbers for workers are provided in the 1835 survey, however a study by Fritz Hodne of factories, manufactories and mining establishments between 1817-19 noted 823 units,


162 Where approximations were provided, the middle value was chosen.
employing 33,200 workers in 1825. Hodne has calculated this to be 3.2% of the total population of 1,051,318 in 1825.\textsuperscript{163}

Compared to the leading economic countries of the period, this is miniscule. However, the numbers do not reflect those part-time or seasonally employed in the household manufacturing, for whom this was only yet another pluriactivity. Quantitative data on this is probably impossible to obtain, but one can assume that, based upon the contemporary descriptions, if such work was included, the proportion of the population involved in manufacturing activities would be far higher.

Certain geographical concentrations of manufacturing activities can be identified. Contemporary descriptions tend to emphasise Eastern Norway, especially inland areas such as Hedemarken, as having a large concentration of households engaged in manufacturing. This is supported by the 1776 factory record which shows that the majority were located in Eastern Norway (Akershus stift). Here 206 units were noted, spanning a wide range of sectors. Trondheim stift had 215, but the overall majority of these were saws and grain mills. Western Norway (Bergenhus stift) had only 19 and Christiansand stift (Southern Norway) a mere 3. The trend is repeated in the ratio of artisans relative to population in different regions in the 1801 census. Akershus and Oppland (in Eastern Norway) had 1382 artisans, a relationship of 1:7, while Hordaland (the Bergen area) had 47, a ratio of 1:2000 and southern Trøndelag had 347 artisans, a ratio of 1:15.\textsuperscript{164} With exceptions, much of the industry in later centuries tended also to be concentrated in Eastern Norway, indicating that knowledge of manufacturing, both of how to establish and lead, as well as how to work in such sectors was transferred over time.

There are several examples of communities in other regions of Norway with much domestic manufacturing in the 18th and early 19th century, and under-registration probably occurred in

\textsuperscript{163} Hodne, F.: “Industri på 1820-tallet. Sysselsetting og bruttoprodukt”, \textit{HT}, nr. 80/2001. Hodne calculated that the 33,200 workers constituted 8.7% of what he termed the workforce (arbeidsstok) of 383,000, or 36.5% of the population in 1825. It is not clear what the total workforce number is made up of. Assuming that the workforce in the 1770’s was about the same share (36.5%) of the population, the share of the workforce noted in the 1776 factory record would have made up about 0.9%.

the contemporary surveys, nevertheless the geographical trends are apparent. It could be argued that the lowest concentrations were found in regions where households could manage on communal resources like fish and common land, and thus did not have to engage in market oriented activities. However, as the regions with lowest concentration also coincide with a heavy engagement in the export sectors, this is not a plausible explanation. The high concentration coincides with regions not engaged in the export trades, but which had significant social divergence and a shortage of land. Household manufacturing was thus one of the few opportunities for households in these regions to acquire additional resources. In regions engaged in the export sectors, the potential profits in these made the manufacturing sectors less appealing in the last decades of the 18th century. Contemporary comments also indicate that manufacturing both in “factories” and as household manufacturing was considered unattractive. The parson Andreas Wulfsberg wrote in 1797 that people had a “strange hostility to all unfamiliar work”, preferring instead to migrate to Northern Norway where there was still vacant land.165

Changing conditions, both of resources and in patterns of world trade after the Napoleonic war gradually led to more labour resources shifting to manufacturing. Struggling to find a foothold in the new world market, especially the Norwegian timber trade, no longer offered the same employment and income opportunities as in the boom years around the turn of the 19th century. Combined with a growing population, the opportunities to earn a livelihood narrowed for those unwilling or unable to migrate to find work. That a market for manufactured durable, semi-durable and perishable goods gradually developed in response to new ideals and trends also helped make the production more profitable. This gradually made both factories and household manufactories for the domestic market more appealing, both as full time employment and as a pluriactivety combined with a small farm or cotter place. The pluriactive way which many households also organised their manufacturing activities restricted the efficiency of the production, however taking into account the small scale markets available to most household manufactories it was also a way to spread risk. However, the contact with manufacturing also provided households and individuals with experience of functioning in the market, as well as of leading market oriented productive

activities. This was valuable experiences and important prerequisite for the onset of the Industrial Revolution.

2.4 Imports

Having discussed the main export sectors as well as production of consumer goods for the domestic market, it is time to look more closely at the main imports to pre-industrial Norway. A key to understanding the pre-industrial Norwegian economy was that Norway was not a self-sufficient economy, and that imports, especially of grains, were necessary, as were some of the raw materials required for the gradually developing domestic manufacturing sector. With the exception of grain, no studies have ever been undertaken on pre-industrial imports to Norway. This has also proven to be outside the scope of this thesis since the source material has proven to be not only large in scale, but also largely incompatible in the way it is sorted.166

It is nevertheless possible to get an impression of the imports to Norway. Using the customs records of Drammen, one of the largest ports in Eastern Norway, as well as Bergen, the largest Norwegian port and town, in five year intervals from 1770 to 1795 makes it possible to identify some trends.167 Firstly, the variety of goods spanned a wide range, from exotic spices, rice, lemons and fruits, to textiles such as silks, broad cloth, damasks, velvet, and to various tools and manufactured goods. In general the impression is that the variety of goods was no less than that available elsewhere in Europe. The amount and selection of goods arriving from domestic ports appear to have been far larger than that coming from foreign ports. This corresponds with the state’s policy of using Copenhagen as the main distributive centre.

166 The individual customs ports’ records have survived in some cases as far back as the mid 17th century, but the compilation of them was lost in the 19th century. With the exception of Bergen, each of the Norwegian ports in the last decades of the 18th century made their records in much the same way. Imports were divided into two groups; goods which came from foreign places such as England, France, the Netherlands or the German states, and goods which came from ports in the Danish-Norwegian state, including the Duchies of Sleswig and Holstein and the isles in the WestIndies. The latter group was by contemporary law not classified as imports, but for a study of what Norway acquired from others, it should nonetheless be included. The two forms of imports were recorded in different ways; those from abroad were noted with both the amount and value, while only the amount was noted for goods coming from domestic ports. It is not clear if domestic and foreign goods were valued in the same way, and it is therefore not possible to calculate total values of imports of goods arriving at Norwegian shores. It should also be noted that these sources do not reflect the cross-border trade with Sweden.

Goods from domestic ports were tax free, or taxed lower, while high custom duties were placed on foreign goods, especially manufactured or processed goods in order to support domestic production. Sumptuary laws and customs barriers in some instances attempted to regulate what the authorities perceived as unwanted luxuries and habits spreading among the population.\textsuperscript{168} These laws were difficult to uphold, and were replaced by high tariffs to deter use and bring profits for the state.

The largest import consisted of grains, both from domestic and foreign places, but as it is thoroughly discussed by Jon Herstad, it will not be emphasised here (see part 2.3.1 in this chapter for a brief discussion of grain imports).\textsuperscript{169} Following grain, spun and unspun linen were the second most valued imports from foreign places to Drammen, whilst in Bergen salt from Southern Europe dominated. Linen supplied domestic needs, and salt was a pre-requisite for conserving food, and especially clipfish. Other imports from foreign places varied somewhat both between the ports and over time, but tobacco and tiles from Holland, lead and saltpetre from France, spirits from Altona and cloth from England tended to dominate.

Since goods arriving from other ports in the union, but in this context understood as imports, were not valued and no price series are presently available to do so today, it is difficult to identify the largest imports. Nevertheless, some goods stand out. Malt was necessary for making beer, the everyday drink of Norwegian households in the pre-industrial period. Imports of spirits rose dramatically; in the case of Bergen, from 75 900 litres in 1650-65, to 681 600 litres in 1743 and 1 243 000 litres in 1755.\textsuperscript{170} A study of confiscated stills in 1756 and 1757 indicates that in Northern and Western Norway there was little domestic production of alcohol, indicating that the population in these regions purchased their drinks from the town or rural retailers.\textsuperscript{171} Tobacco leaves originating in the Americas also stand out as

\textsuperscript{168} For. 20.1.1783: Ang Overdaadigheds-Indskrænkning for Danmark, Norge og Hertugdømmene… and For. 12.3.1783: Ang. Overdaadigheds Indskrænkning i Bondestanden i Danmark og Norge. in Schou, J.H.: \textit{Forordninger}.
\textsuperscript{169} Herstad, J.: 2002.
\textsuperscript{170} Fossen, B.A.: 1979, p. 590.
\textsuperscript{171} Tveite, S.: 2007.
significant imports from Denmark, as does West-Indian sugar, of which much had already been refined to syrup or other sorts of sugar by the Copenhagen sugar refineries.

2.5 Financial system

Although thorough studies of the financial systems prevalent in pre-industrial Norway remain to be done, some trends are still identifiable. While Norway was part of the Danish-Norwegian union, fiscal structures were decided in Copenhagen. Facilitating interregional trade, Norway had the same currency as the rest of the union. From 1772 interest rates on letters of mortgage was set to 4 percent and bills of exchange to 5 percent. Despite political pressure from Norwegian interests, a national bank was not established until 1816, after the union with Sweden. Until then Norwegian merchants had drawn credit and letters of exchange on traders in Copenhagen, Amsterdam and London, and in this way had been part of the developing European financial system and therefore had access to international capital.\textsuperscript{172} During the Napoleonic war, and immediately after, the Norwegian economy struggled to have establish stability, and several devaluations severely reduced the value of the currency.

Parts of the fiscal changes were also different rates of exchange for debts. Mortgage debts which most businesses interests had incurred before the war were \textit{subject to a progressive rate of exchange with age}, which meant that such debts incurred before the outbreak of the war were increased by several hundred percent in real terms.\textsuperscript{173} At the same time the so called “book debts”, which were simple entries in a merchant’s ledger, were converted at the current rate of exchange at the time of their reform, whatever their age. The high inflation in the war years meant that the letters of mortgage possessed by businesses and some landowners increased in real terms, while the book debts, which were what most households had actually declined, making them easier to repay. Repayments to Denmark after the break-up of the union, combined with the significant debt of Norwegian merchants to foreign bankers, further complicated the fiscal challenges for the new nation. Heavy taxes on exports were imposed to bring in money, and taxation was tripled between 1817 and 1818, of which a significant share


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fell on urban dwellers. As such, in many cases farmers’ households in rural areas came out better than the urban merchants.\textsuperscript{174}

\textbf{2.6 Conclusion}

Unlike several of the leading pre-industrial economies, technology and specialisation played only subsidiary roles in the economic and structural changes taking place in rural Norwegian society. Instead, international trade, in the form of exports of processed and semi-processed goods primarily to other European countries and production organised by households as pluriactivity, was the main driving force for the economic and structural change that took place. The dominance of the export trades shows that their importance as catalysts for change and development were not limited to the 19\textsuperscript{th} century, as former studies can give the impression. Instead, Norway’s road to an industrial revolution and entrance into a modern market economy was being paved by changes already taking place in the pre-industrial period.

It was the growth of European populations and economies, combined with political manoeuvring that placed Denmark-Norway in a position to exploit the opportunities opening in the European market. As demand increased and as the numbers of competitors were limited by warfare or diplomatic difficulties, prices for timber rose both in relative terms and when adjusted for inflation. The expansion in 1795 of the amount permitted for exports further increase profits in the sector. In fishing, prices remained relatively stable when adjusted for inflation, as well as in relatively to barley. Instead profits were kept up by shifting and increased production.

As much of the production both occurred and was controlled by people in rural areas, profits also benefitted these areas. The rural control of resources was further strengthened by the financial system in the early 19\textsuperscript{th} century, favouring rural interests. Nevertheless an open

Norwegian economy and the overall importance of the exporting sectors like timber, fish, shipping and metals, made the Norwegian economy vulnerable to and dependant on, changes in the European and world market. As such, the major fluctuations that affected the economy were often largely externally caused.

The Norwegian exports largely constituted processed goods and infrastructure which fed into the growth of other European economies. Much of this processing was influenced by rural interests, such as the processing of fish to salt or clipfish which occurred in rural areas, timber which came from forests owned by rural households or sailors who returned home to rural areas with their earnings. Expanding production left an increasing number of rural households with surplus resources which could be spent on improving their living standards, also explaining the population growth and rising life expectancy which took place. Gradually a Norwegian manufacturing sector aimed at the domestic market developed. This created new employment especially in regions where the export sectors only played a small role, but as Chapter 5 will show, saw more goods produced in cheaper ways. Similarly, that households chose to focus on their labour resources of livestock or grain helped to increase the circulation of those goods in the market and enabled other households to reduce their self sufficiency, even if it was never wholly abandoned.

The economic growth occurring in the 18th century was never as intensive, as it later became in the Industrial Revolution and modern economy, however the social and economic changes helped prepare the way for this by gradually accustoming households to taking part in the market as producers and as small entrepreneurs. Norwegian households’ involvement in the market was not characterised by specialisation, instead by pluriactivity. This involvement in, and combination of, many trades was an alternative way towards increased market participation. Pluriactivity made it easier to bear economic fluctuations and cope with a market economy not fully developed since it enabled the household to spread its resources on a portfolio of economic activities, or “legs”. At the same time pluricativity restricted specialisation and tied up labour resources, for at least part of the time. This was a solution that minimised risk and provided security in hard years and some surplus in good years. The pluriactive way to the market may have been slower than that found amongst the economic
leaders, but even if the changes were not painless and had consequences such as increased social diversion, it provided a “softer way” for the population to acclimatise to the new structures of the Norwegian and world economies.
Chapter 3: The development of an internal market in pre-industrial Norway.

Studies both in global history and of the Industrial Revolution have declared that little economic change took place in the pre-industrial period, and that which did occur had little significant impact. These studies ignore, amongst other things, the importance of the development of internal markets which took place in the early modern period, and which were vital for the later Industrial Revolution and modern market economy. An internal market is formed as goods and services can be traded without hindrance within a country’s border. Their emergence in Europe in the early modern period had wide-reaching economic consequences such as facilitating the exchange of goods, specialisation, factor mobility, as well as increased market access for a larger share of the population. These were slow and gradual changes which in some cases went on into the 20th century. Even if they did not lead to a sudden spurt of growth, they were vital prerequisites for the later Industrial Revolution to take off.

For a country as large and geographically varied as Norway this chapter will argue that internal market formation was made possible through gradual changes in transport infrastructure and juridical development. The internal Norwegian market was not fully developed until the early 20th century, but the changes which did take place in the pre-industrial period helped expand the reach of the market into new communities. This enabled the produce of rural areas discussed in the previous chapter to reach the international market, as well as new goods and trends such as those discussed in chapters 5 and 6, to reach even the most remote Norwegian communities.

Until now there has been no attempt to look at the multitude of and interaction between trading forms which were the practical means by which the exchange of goods took place. Nor have there been any studies of the new trading forms such as guest houses and rural shops

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which became increasingly widespread. In the 1940’s and 1950’s some historians and ethnologists studied what eighteenth century lawmakers called “traditional farmers’ trade”, emphasizing empirical evidence, and rarely placing trade in a wider, analytical context.\textsuperscript{176} More recently historians have focused on towns, emphasising their importance as centres for trading and the distribution of goods (and ideas).\textsuperscript{177} Most of the studies of trade have dealt with the wealthy and emphasized their participation in international trade, or focused on petty urban traders from certain social groups.\textsuperscript{178}

This chapter seeks to abate the lack of an analysis of the beginnings of the Norwegian internal market. It does so by first identifying signs of market integration, followed by closer studies of some of the processes through which the integration occurred. It will emphasize changes in transportation infrastructure, changes in trade laws and regulations, and the spread of new retail forms. As a backdrop to these discussions it is necessary to look at some of the theoretical arguments concerning the development and importance of internal markets, as well as a brief overview of the main Norwegian regions.

The chapter is based on an extensive, but fragmented secondary literature including both local history studies and more general works. Primary sources such as trade laws and privileges have similarly been important to grasp, being the legislative system within which the internal market evolved. Contemporary studies of domestic trade, as well as applications for trading privileges have been important in order to increase the understanding both of the scale and variety of trade taking place.


\textsuperscript{177}Helle, K., F.-E. Eliassen, J. E. Myhre and O. S. Stugu: 2006.

3.1 Internal market formation

A key to the development of a modern capitalist economy lay in creation of internal markets which occurred in the early modern period. Before this, towns had dominated economic life restricting local trade to the region either within a village, between communities in the same region, or with the region’s own town. External trade was similarly restricted to that between towns and was controlled by town merchants, but often not the town leaders. It could expand locally without limit, but not into the hometowns’ surrounding regions. Fearing competition, towns strictly regulated any interaction between the two, e.g. imposing institutions such as guilds or privileges. This made towns islands of economic activity, surrounded by rural areas of relative stillness. The Hansa towns in Germany and Northern Europe, as well as the Italian and Spanish city states and regions have been used as examples of this way of organizing the town and its hinterland.179

The situation changed in the early modern period. In countries such as England much wealth came from foreign trade, and institutions such as the state allied themselves with merchants early on in order to break the towns’ dominance and to connect local and external trade. This approach integrated formerly separate regions and created an internal market within the state’s borders in which lower production costs could be achieved through nearness to raw materials, exploitation of labor with low opportunity costs, and avoidance of urban taxes and guilds.180 Even if trade barriers were built against other states, the new trading areas included more regions and thereby more producers and customers than previously. The inter-regional trade helped provide what was difficult to produce at home, thus reducing the need for self sufficiency and enabling specialisation. In this way markets became larger, competition grew, and profits increased spurring economic growth. The process was faster in states which gave weight to trade and industry interests, than in those where old legal frameworks still favoured the nobility and the urban privileged. The forming of new and the disbanding of old

institutions in an attempt to increase predictability and efficiency was one way that this occurred.\textsuperscript{181}

Inter-regional trade did not only increase within countries, but also between regions in different countries, thereby forming what some have called a “world market”.\textsuperscript{182} By “world market” was not necessarily meant \textit{an actual market a long way away... [sic]... What it did mean was that the market was not necessarily confined to an easily accessible vicinity, but could range beyond a region’s or even the country’s boundaries, over many far-away areas simultaneously, and that it could switch from one area to another as opportunities arose or were closed.}\textsuperscript{183} As trade occurred in a larger area, this growing world market was characterised not only by increased competition but also by new opportunities to expand businesses. This resulted in improvements in production, lowering of costs and the employment of previously unused labor resources in rural areas, whereas urban areas helped concentrate markets and coordinate trade and production. The previously dominant large urban centers, often in the south of Europe, entered into a period of decline, unable to compete with rural areas, as well as against a growing number of smaller towns along the north western coast of Europe.\textsuperscript{184}

The development of an internal market is essential in Jan de Vries’ theory of an industrious revolution. The increased efficiency and resource allocation which resulted in a more specialized and productive household was driven and made possible by the availability of goods and necessities produced by others. It is a circle of supply and demand of specialised goods feeding into and driving each other. However, for these goods to reach their potential customers an internal market must exist and function in order to facilitate interregional trade and exchange of specialised products.\textsuperscript{185} For this to happen on a practical level developments in transport infrastructure were necessary to move goods more efficiently, changes in the

juridical system were needed to break monopolies and open up new trading and retail forms such as rural shops. The following discussion will focus on these developments in Norway in the long eighteenth century, but first we will examine an overview of the main Norwegian regions.

Even if the Norwegian economy was without doubt an agricultural economy, different natural endowments, cultural homogeneity and administrative units led to the gradual forming of distinct regions.\(^\text{186}\) Six regions are most commonly used in this study: (see figure 3.1) Eastern Norway (Østlandet)\(^\text{187}\) was the inland area north, east and west of Christiania (Oslo), specialized in grain and timber. This was also where many of the iron mines and smelts were located as well as much of the early modern manufacturing. Western Norway (Vestlandet), from Bergen to Stavanger, was at the start of the period engaged in the timber trade, but as this resource ran out the coastal areas of western Norway specialized in fish and the internal parts on meat and dairy products. Southern Norway (Sørlandet), approximately the region Agder, had first been engaged in the timber trade, but as partial deforestation took place, shipping of the timber and metals took over in importance. In Trøndelag, the area north and south of Trondheim, the coast was engaged in fisheries and the inland in timber. Copper was mined in the mountainous parts. Northern Norway was a frontier still undergoing internal colonization. It supplied fish products for the export trade, and depended on other regions for grain supplies. The mountainous interior (not marked in map 3.1) encompassed the inland mountainous areas both in eastern and western Norway and Trøndelag. It was never a separate region, however. It was distinct through its common geography and in that communities in this area engaged in meat and dairy production, and from the mid-eighteenth century increasingly also in timber.

\(^{187}\) These are the names of the regions most commonly used also today. The square kilometer the regions are: Norway in total: 323 451 km\(^2\), Eastern Norway: 94 579 km\(^2\), Western Norway: 58 330 km\(^2\), Southern Norway: 16 490 km\(^2\), Northern Norway (inkl. Mid-norway: 41 228 km\(^2\) and Northern Norway: 112 824 km\(^2\)) : 154 052 km\(^2\). In comparison France is: 674 843 km\(^2\), the Netherlands: 41 526, Italy: 301 230 km\(^2\), England: 130 395 km\(^2\).
Map 3.1: Regions and main cities in 18th century Norway.\textsuperscript{188}

\begin{center}
\textbf{Norway}
\end{center}

Regions and main cities

\textsuperscript{188} I am grateful to Monica Hestad for helping me with maps.
3.2 Signs of market integration in Norway

Many of the issues which were (and are) significant difficulties in the internal market formation in other countries were not problematic in the case of Norway. There were, for example, no customs barriers between Norwegian regions, and throughout most of the 18th century there were none between the regions of the Danish-Norwegian union and only a few customs barriers with Schleswig and Holstein. Language difficulties were minor as Norwegian dialects all descend from one language and Norwegian was also closely related to Danish (and Swedish). The written language was Danish, combined with German in specific cases. The currency was also the same in all parts of the union easing the practical side of payments in interregional trade. Also labour mobility was high as the population either owned or rented its land, and could therefore leave if they so wished. This facilitated inter-regional migration; from inland areas with pressure on resources to towns, coastal regions or the north, all of which offered more opportunities for employment and enterprise.

A thorough study of market integration in pre-industrial Norway still needs to be undertaken. In lieu of this, a study of the convergence of grain prices in different regions or towns may be used as an indicator that market integration occurred. Figure 3.1 shows the convergence of grain prices189 in Akershus (a region of eastern Norway including Christiania), Bergen, and Trondheim between 1700 and 1809. Grain is not an ideal good to use as Akershus was under the jurisdiction of the Danish grain monopoly, while Bergen and Trondheim were not and could freely import grain. Also, the prices are based on urban markets, and therefore say nothing of the market integration in interior regions. However, as rural people purchased much of their grain in towns (see 3.2.2b on traditional farmers trade), the price may be more representative than it first appears. Lacking other Norwegian prices it can be used to gain an impression.

189 The grain prices are collected from “kapittelaktster”, that is monthly prices (also called pris curant) as reported by town authorities to the state. The prices were set at the end of the month and show the most frequently paid cash price for goods. These prices were made available in five year averages by Herstad, J.: 2000, p. 384.
Figure 3.1 indicates that, excluding fluctuations coinciding with problematic grain supplies and periods of eased import restrictions, the general trend was indisputably one of declining price differences between the three towns. Not surprisingly this was especially the case after the lifting of the grain monopoly in 1788. This strongly suggests that the Norwegian regions became more integrated through the 18th century.

3.3 The process of market integration in Norway

The Norwegian economy before the industrial revolution has been described as consisting of regional economies with little interaction.190 This is correct in many respects as geography, in the form of difficult terrain, long distances, and harsh weather, has been a continuous

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underlying influence and obstacle in Norwegian development and internal market formation. Another obstacle in the long 18th century was the trade legislation in which mercantilist interests had long restricted trade to only a few places and persons. The following sections will look into how these challenges were partially reduced or circumvented through developments in transport infrastructure, judicial change and the spread of new retail forms, all of which helped create increased market integration between the Norwegian regions.

3.3.1 Transportation infrastructure

Both physical and institutional changes in the transportation infrastructure were important for pre-industrial Norwegian market integration, both over land and by sea. As was the the establishing of institutions to improve communications. Together these reduced costs connected to interregional trade enabling the market to reach further afield and include more households, increasing the predictability of trade transactions and helping to encourage the exchange of information between regions.

3.3.1a Inland

Transportation over land was difficult in Norway in the long eighteenth century as road infrastructure was little developed. Most rural roads were (if not washed away by spring or autumn floods) only traversable on horse or foot. Some communities, such as Trysil in the mountainous interior, were virtually isolated in these seasons. The use of wagons and carts was difficult except on the most travelled roads close to towns, and even the best roads were so bumpy that suitcases would fall off a carriage. Since the Middle Ages farmers had been responsible for the upkeep of roads as part of their public duties, but this proved rather hit-and-miss and often depended on the individual farmer. The troublesome road conditions therefore made it easier for most transport to occur in winter when the snow and ice turned rivers, lakes and marshes into virtual “motorways”, and the frozen muddy roads and snow-covered land made sledging a viable form of transport. The exception was the trade of live

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191 Smith, A.: Trysil, TJ, 1797.
192 Thomas Malthus’ suitcase fell off his carriage when travelling on one of the supposedly best Norwegian roads. His mood did not improve when he discovered it had been stolen. Malthus, T. R.: Reisedagbok fra Norge 1799, Cappelens forlag, Oslo, 1968.
animals which took place in summer time since the animals could walk on their own four hooves to the market.¹⁹³

Changes occurring during the long 18th century nevertheless helped lay important foundations for the domestic market, as well as for the later Industrial Revolution. The establishing of new institutions responsible for road and transportation development, a postal system and a unified system of weights and measures were amongst these. Road building and improvements were initiated, for military reasons, from the mid-seventeenth century onwards. A road administration was established in 1665, consisting of two *generalveimestere*, one for the north (Trøndelag, the western and northern regions, as well as parts of the mountainous inland) and one for the south (the eastern and southern regions, and parts of the mountainous inland). They were responsible for supervising the upkeep of all roads, but especially those leading to forts and military installations. Road building at this time was characterized by fairly straight lines, paying little attention to gradient.¹⁹⁴ This was not without its problems, especially in mountainous regions of Norway where parts of these roads were so steep that they were nearly impassable for carts. The majority of the roads were only passable by horse or on foot.

By the mid eighteenth century improvements had begun. Most of the road between Christiania and Trondheim could be travelled by cart, and in the 1790s a number of improvements were made to roads to Kristiansand as well as in parts of Western Norway.¹⁹⁵ From inner Telemark it was reported that a local road official had managed, despite opposition from local farmers and officials, to improve the roads so that not only were they traversable by horse and later by wagon, but even plowed clear of snow during the winter months.¹⁹⁶ Such improvements also helped trade interests and should be considered together with developments in the inland waterways.

Growing international demand for timber and rising prices from the mid eighteenth century discussed in chapter 2 made the forested rural areas inland financially attractive. This stimulated infrastructural developments financed by private interests, increased efficiency, and enabled more logs to reach the sawmills along the coast. These developments mostly took place along waterways since it was far more efficient to float the logs than to haul them overland. At first the attempts consisted of small improvements, such as removing sandbanks and shallows from rivers, but at the turn of the nineteenth century this was insufficient to eliminate the bottlenecks. Private funds procured from the timber trade were invested in transport infrastructure and made it feasible to procure new and more efficient technologies. One example of this was the water powered lift called “kierad” which in the 1790s was built to move logs 3 km up a 386 m steep hillside in order to gain access to the larger Drammen river system. Smaller versions of this lift were built to help lift logs to sawmills or up smaller hills. \(^{197}\) They also established a network of representatives to purchase timber directly from the farmer, sometimes even while it was still planted. \(^{198}\) In the first half of the nineteenth century timber merchants also formed cartels to invest in more capital intensive projects such as sluices and canals (which in some cases remained in use until the 1990s).

The dependence on waterways dictated in most cases that the timber transportation systems seldom led to trade between the Norwegian regions. Instead they sometimes resulted in tighter links between ports and the hinterland as they increased communications between the two. This enabled port interests to increase their influence, but also enabled previously peripheral inland areas to take part in the inter-regional European timber market as producers, as well as engage in the slowly developing internal market as consumers of goods provided by the ports.

Inland travel continued to be cumbersome until the 1840’s, when it became possible to use steam boats on the inland lakes and build railways across the land. For people based inland


this meant faster ways of transporting large amounts of goods, thus increasing the scale and scope of economic activities in rural areas, as well as the possibilities of inter-regional trade.

3.3.1b Sea

Whereas terrain could be an obstacle for inter-regional trade, the sea bound regions together much more efficiently. Even if sea travel was more uncertain, as fickle winds could prolong or even abruptly end a trip, it was still by far the easiest, and thus also cheapest, way to travel and transport goods. This is confirmed by consumption duties on domestic goods arriving legally to towns in southern Norway. Between 1792 and 1812 duties on goods brought by sea on average totaled six times more than those arriving over land, despite being under the same tax regime. The difference between land and sea trade is best explained by a ship’s ability to carry more, travel further and do so at a lower cost than transport conducted by foot, on horseback or an animal-drawn cart. Also, as population density was higher along the coast than inland there were potentially more producers, traders and customers to be found at the coastline. These estimates do not cover smuggled goods, or what was traded outside the privileged towns or markets. There is nevertheless no reason to believe that the general impression is misleading. The relative ease of sea travel also made cross-border coastal trade easier, as in many cases it was easier to trade with neighboring countries than those inland. The North Atlantic trade network and trade with Russia (the Pomor trade) are examples of such.

In regions where fishing was important for the export sectors, infrastructure in the form of more permanent locations for drying, salting and hanging the fish were established. These increased the capacity for productivity and storage for the stock fish and dried fish trade. These were often financed by local capital, often a local merchant or some of the wealthier

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199 Consumption duties (konsumpsjonsavgift) was a tax paid on domestic foodstuffs brought to privileged towns (kjøpsteder and some ladesteder, see later in the chapter for explanations of these terms). Consumption duties were first imposed in 1657, but made permanent from 1680. From 1682 grain was exempted (but a milling tax was placed on it instead). The collection of consumption duties was farmed out to private entrepreneurs for stretches of the 18th century, but from the 1780’s was back in the hands of the state, and from the 1790’s placed under the customs department. The consumption duty was lifted 1.1.1828. Source: Norsk historisk leksikon, 2004.

farmers. They would buy fish from the local fishermen, process it, before selling it to urban merchants who exported it. Gradually a network of urban merchant representatives also spread in rural areas to purchase fish.

The weather was a danger for sea travel and trade, but weather along the coast itself could also be treacherous. Already in the middle ages maps were used by the Dutch, Hansa and even Mediterranean traders to safely navigate the Norwegian coast. From the latter part of the seventeenth century onwards lighthouses were built to increase safety at sea. At first they were run by private individuals who had been granted state privileges, but as the eighteenth century progressed they were gradually taken over by the state. Only ten had been built when in 1821 they were placed under the office of the Kanal- og Havneinspektøren (the canal and harbor inspector) who in the following years laid the plans for the expansion of lighthouse construction in the nineteenth century. Pilots became institutionalized in the 1720’s, when in the wake of the great Nordic War, admirals had complained about the Norwegian pilots. There had not previously been any educational requirements, but the new laws in 1720 and 1725 set an examination as a prerequisite for pilot privileges. These institutions helped make the coastal trade more advanced than the inland trade during the late eighteenth and early nineteenth century.

3.3.1c Other infrastructural changes

The skyssvesen (a coaching or conveyance system) was an institution which aimed at alleviating the challenges of travelling both by land and by sea. It was established in 1648 and was a system which relayed travellers along the main routes by distributing the burden of transportation and lodging for travelers equally between communities. At every mil the traveler should be given a new horse or boat with rowers, and at every third mil a farm or state official’s house should have guesthouse functions. No funding was provided to finance the service; instead all, except those travelling on the King’s business, were required to pay their way. In unpopulated areas along the main travel routes open un-manned huts

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201 Kystverket: http://www.kystverket.no/?aid=9030946
202 One mil was defined as the distance one walked or rowed before taking a break (also called “rast” (break)). The mil is still used in Norwegian today, but is defined as being 10 km.
203 Res. 24/12 1648, §7 and 8. In Schmidt: Forordninger and in FOAa.
provided shelter for travelers. The system spread gradually into the various regions, following the main transport and travel routes. Over time it also came to play a role in the distribution of new durable, semi-durable and perishable goods, which this will be discussed later on in the chapter.

A postal system was also developed in the seventeenth century to help speed up the spread of information. At first its purpose was to convey information between the King and his officials in Norway. There were five postal routes: Copenhagen-Christiania, the others between Christiania and Bergen, Trondheim, Kongsberg and Stavanger (through Christiansand). In the 1690s a route was also established for Northern Norway between Trondheim and Vardøhus. Post offices were only established in the larger towns. Unlike in other European countries, where professional couriers were used, Norway, imitating Sweden, used locals, called postbønder (mail farmers) who were exempted from tax, as well as military conscription in return. As more routes were added, road conditions improved and literacy rates rose, the post became an increasingly important means for transferring knowledge and information between regions.

Contributing to the easing of inter-regional transactions was the Danish/ Norwegian introduction (as one of the first European countries) of a unified system for weights and measures. It was implemented in the 1680’s to replace the multitude of regional and local systems operating within its borders. The reform was implemented for trade and taxation reasons and was the achievement of the internationally renowned Danish scientist Ole Rømer. Weights and measure officials, who previously worked for the town administration, became state appointed and employed. This helped break old bonds, replacing them with a local network directly answerable to the King. The King’s representatives were

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206 In correspondence with contemporary scientific principles the weight measurement was linked to the length measurement, but instead of using the second pendulum (A pendulum which makes one swing a second) he established an archival length measurement as the standard (An archival measurement is a set measurement, not dependant on time and natural variations. The meter is an example of such). This was radical in its time, but later used in the metric system. Ole Rømer also constructed the first street lighting system in Denmark-Norway, making the streets of Copenhagen both safer and easier to travel in winter and by night. Hutchison, R.: Fra mangfold til enhet. Justervesenet og historien om mål og vekt i Norge, Justervesenet, Oslo, 2006, p.20-29.
also expected to regularly inspect the measuring tools used in economic transactions. This system took time to implement, but by the last half of the eighteenth century it predominated, easing inter-regional trade and transactions by ensuring that all were using the same units of measurement.²⁰⁷

3.3.2 Jurisdictional change: the opening of trade

Easing transportation and inter-regional communication were not the only developments facilitating interregional trade; judicial changes also played a significant role. Institutions like trade laws and regulations may support or hinder internal markets as they regulate the terms by which actors engage in the market.²⁰⁸ Even though there were few or no interregional customs barriers, there were other obstacles related to laws and regulations which had long restricted the integration of regional markets. Changes in these led to the increase of inter-regional trading places, as well as of the number of actors trading, in goods and ideas, between regions.

Mercantilist policy had long dominated the laws regulating internal trade, doing so by restricting trade to a limited number of towns, fairs and traders, and requiring the rest of the population to adhere to these. But as chapter 2 discussed, the mercantilist policies were gradually relaxed, not as a consequence of more liberal ideas, but as a way to curb the smuggling resulting from failed protectionist policies. Geographical issues and the sparse population made it unrealistic to uphold these legislations. In Sweden this was solved by passing a law in 1789 to include even the sales of the farmer’s neighbours’ produce.²⁰⁹ Danish-Norwegian state institutions were also aware of the problem, but instead of one unified decree, a net of regional rulings and local exceptions were issued which opened trade to more groups, and towards the end of the 18th century also liberalized domestic trade. This section will look closer at how jurisdictional developments in relation to urban monopolies, traditional farmers trade, fairs and small towns helped further Norwegian inter-regional trade

by breaking down monopolies and allowing more legal traders, and in this way enabling more households to take part in, and access, the market.

### 3.3.2a Breaking down urban monopolies

Conflicting interests between privileged town merchants, rural traders and the state marked much of the creation of internal markets in early modern Europe. Town merchants wanted domestic trade to occur in towns, whilst rural traders argued for freer trade. In states with a mercantilist economic policy town merchants were long supported by the King because limiting trade to specific localities made the taxation of trade easier. The alliance took many forms, in some places all trade outside towns was strictly banned. This coercion helped establish markets and commercial security by providing stable and predictable market places for the rural and urban population to sell and purchase goods. Once established, rent-seeking and monopolies had to be avoided by gradually liberalizing trade and the financial sector in general.  

In Norway’s case the alliance between town merchants and the King resulted in the 1662 (and preceding) town laws for the chartered towns (kjøpsteder). As in other places the state was motivated by taxation interests, while urban merchants wanted to secure influence. The charters became the foundation for the inland trade policies throughout the long eighteenth century, but over time their influence waned, being undermined not only by the state but also by practical considerations connected to Norway’s geography.

Chartered towns were at the top of the urban hierarchy because of their privilege to both import and export goods and they held key positions in the Norwegian economy through their connections to the European and world economy. They were politically and legally separate from the surrounding areas through their governing institutions, as well as in their jurisdiction of the town’s territory, population and any outside traders operating within it. The rights were declared in the town’s letter of privilege, of which the privileges of 1662 set precedence.

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These stated that hinterlands should only sell their goods in their respective chartered town and that only those merchants from chartered towns could be middle men in trade transactions and have full trading rights. Table 3.1 shows the share of customs and consumption income from different Norwegian towns at the end of the 18th century. It does not cover illegal trade and smuggling which is known to have been rife. It nevertheless shows that the chartered towns continued to dominate trade relative to other urban settlements, more than a century after the urban privileges were imposed, but also that this declined towards the end of the 18th century.

Table 3.1: Norwegian ports share of trade expressed through share of customs and consumption fees, 1773, 1781, 1791.

<table>
<thead>
<tr>
<th>Ports</th>
<th>Share 1773</th>
<th>Share 1781</th>
<th>Share 1791</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bergen</td>
<td>15</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Christiania</td>
<td>8</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Christiansand</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Drammen</td>
<td>11</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Trondheim</td>
<td>2</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Other towns</td>
<td>60</td>
<td>43</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: RA, Oslo, Rentekammeret og generaltollkammeret, Ekstrakter, 79 Beregninger over toll og konsumpsjonsintradens beløp 1773-1812.

The actual trade in Norwegian towns was conducted by a combination of privileged merchants and hawkers, and farmers who sold their produce. The charted towns’ privileges placed the merchants in key positions as middle men in domestic trade as well as foreign trade. This meant they could import and sell grain, manufactured goods and all sorts of other foreign goods, as well as purchase timber and fish for export.  


Hutchison, Ragnhild (2010), In the Doorway to Development: An enquiry into market oriented structural changes in Norway ca. 1750-1830 European University Institute DOI: 10.2870/19493
The merchants’ trade privileges were gradually undermined with the aid of the state. This occurred through the increase of small scale traders called høkere (hawkers/small scale peddlers) licensed to trade in small or medium sized quantities of necessities such as grain, salted and dried meat, fish, salt, flour, peas, tar, tobacco, beer and alcohol. Hawkers either produced the goods themselves, or used their license which allowed them to purchase from a merchant and re-sell to others. Their favour is illustrated when one considers that no other group were granted as many trade privileges in Christiania as hawkers were: 419 between 1745 and 1784, making an average of 10.9 and a top of 18-19 a year. Some were also licensed to trade in rural areas. These were often closely linked to town merchants, often as employees.

Several nevertheless operated on their own accord. A study of the merchant Andreas Schiøller’s books from 1799 to 1805 shows that he had several customers who were probably rural hawkers. One was Jon Iversen Tanen from Aamot who purchased large quantities of scarves in different colours and patterns, and who had also purchased other similar sorts of goods. In some cases certain social groups who would otherwise fall into poverty, such as wounded soldiers, or widows, were granted hawker privileges in the hope that this would provide them with a livelihood and therefore keep them away from crime, or the poor house.

The urban merchants’ privileges were difficult to uphold in rural areas. The insistence that the hinterlands do their trading in the chartered towns made the latter important markets for the surrounding hinterlands, but the influence decreased with distance. People living within a day’s journey sold necessities like fire wood, fish or food supplies which the town’s small urban agriculture could not sufficiently provide. Studies of consumption tolls in Stavanger in the years 1680-89 show 17 000 payments from people coming to town to sell such goods. This was four times as many as the total population in the stift (diocese). 13 000 were farmers and 85 percent were from places within 50 km of the town. Similar trends have been found for Bergen and are likely to be valid for other Norwegian towns. More distant households also made trips to town in order to sell their fish or timber to the export trades, as well as stock up on necessities and perhaps some everyday luxuries like silk ribbons or tobacco. The long distances restricted contact with towns to seasonal or even yearly visits, or to the use of

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213 RA, Oslo, Privatarkiv nr 87, Andreas Schiøller, hyllenr: 3b00515.
intermediaries (which will be discussed later). These same geographical issues also made it easy for smugglers or other traders to perform their activities without much threat of discovery, as a transaction could be performed in a cove before arriving at a port, or a crossing before entering a town.

3.3.2b Traditional farmer trade

The gradual opening of the merchantalist domestic trade laws were also found in the State’s changing attitude to farmers’ trade. The 1662 urban prerogatives regulating trade to towns made exceptions for what some termed “traditional farmers’ trade”. This was never clearly defined, but appears to have implied that the rural population could sell the goods which they themselves had produced in the household, trading with other regions or towns and at markets. In 1753 a law stating this was clearly imposed and rural people were permitted to sell their own produce. This was expanded in 1797 to include the purchase of goods, on the provison the goods were not re-sold. Middlemen in trade transactions were generally illegal, but exceptions to the laws were made for several trades, such as rural horse traders who from 1750 onwards only needed a pass from a local official to conduct their business. There were also regionally specific trade laws; in Finnmark trade was opened up for all in 1715-29 and again from 1789. In Nordland it was open between 1715 and 1729, and then again from 1813. In Southern Norway regional trading laws stated specifically that rural shopkeepers should not, unless permitted, interfere with the farmers’ traditional trade in fish and similar goods, which those in Gudbrandsdalen, Hallingdal and Østerdalen have engaged.

220 §7 ”ligesom de heller ei, formenedt denne tilladelse, maas besynderlig de i Gudbrandsdalen, Hedemarken og Østerdalen hidindtil have bragt”. Res. 3.2.1753 in Wessel-Berg, F.A.: Rescripter.
It was common practice that rural people brought goods for townsfolk if they had been ordered in advance.\textsuperscript{221} An example of this was noted in the inventory of Niels Olsen from Heroy in 1808, as Niels had sent money with his neighbor to buy necessities in Bergen.\textsuperscript{222} In this way one person could legally do the shopping for many, whilst circumventing the laws concerning middle men. Through legal exceptions and regional regulations, a large number of Norwegian households and communities could in some way argue (or convincingly lie) that they fit the exceptions in the laws regulating trade and thereby engage relatively freely in it. The legalization of traditional trade increased households contact with the market and reduced the transaction costs connected with smuggling and illegal trading. This not only made larger purchases easier and increased predictability, but it also put households in contact with a wider selection of goods, thus increasing both the scale of purchases as well as inspiring consumer aspirations for more and new goods.

What was repeatedly stated as illegal in trade were bissekremmere. These were middle men operating on their own, for producers or merchants and selling goods like imported clothes and tobacco in rural areas, or goods like wooden boxes or textiles to towns or other regions.\textsuperscript{223} The bissekremmere tempted many, especially simple folk, to buy what they could and should not.\textsuperscript{224} However, since distances made long trading trips difficult, their existence was crucial for many households. Repeated attempts to ban them did not help, nor did the harsh punishments meted out on those housing them. And rewards offered for tip offs leading to their arrest proved ineffective. The prosecution may well have hampered the growth of rural trading entrepreneurs, but at the same time regulations allowed bissekremmere to move into the towns and become privileged merchants.\textsuperscript{225}

Those trading were often from communities with pressure on land resources. They were often the younger sons who stood to inherit some wealth, but not enough to buy their own plot of

\textsuperscript{221} Schweigaard, A.: 1841, p. 76-81.
\textsuperscript{222} Skifte 17.3.1808, Niels Olsen, Volsund farm, Heroy.
\textsuperscript{223} RA, Oslo, Privatarkiv nr 87, Andreas Schioøler, hyllenr: 3b00515; Sundt, E.: Om Husfliden i Norge, Christiania, 1867-8, Chap. 4 Omkring Mjøsen, online: http://www.rhd.uit.no/sundt/bind8/eilert_sundt_bd8.html
land or farm, and when they were not travelling they would take on short-term work. Over time some earned enough to buy a farm or become cotters, others became specialized traders, sometimes even accumulating significant wealth, while others only scraped by or fell into poverty. Women could frequently be found amongst the rural traders.226

Inland trade was dominated by people from the mountainous interior227 and inner parts of Western Norway. They traded in livestock, horses, and animal products like meat, dairy, hide and fertilizers from their home regions, in exchange for grain, manufactured goods or cottage industry products from towns and markets.228 The type of boat most frequently used in coastal trading was a jekte (sloop), thus the term jektetrade. Going from Sunnmøre to Bergen they would fill the boats with:

*dried fish, herring, cod liver oil, caviar, hides of fish and goat, squirrel furs, and similar goods. Returning they bring all sorts of grains, even ship’s biscuits, as well as salt, wine, spirits, malt, linen, hemp, sailcloth, iron, cloth, spices and other “krambod”(rural shop) goods. Some sloops go to Trondheim with meat and dairy, wooden bowls and coops for barrels, bringing home poorer grains, some millstones and other smaller items.*229

Goods were also brought to smaller towns, such as Molde, as well as to seasonal markets. A common procedure was to sell provisions to fishermen out at sea, purchase their catch and sell it in places like Ålesund or Bergen. Many also sold manufactured goods and imports to the local population along the way, or transported goods for town merchants. Rural jekte captains completely dominated costal transportation; in 1754, 71 of the 74 vessels engaged in the east-west trade from Bergen were from Egersund and other small ports along the coast.230 Foreigners, especially Swedes, were not uncommon amongst the inter-regional traditional

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227 People from Gudbrandsdalen, Numedalen and Hardanger dominated, but other communities also participated  
farmers’ trade. They sold iron and textiles from Southern and Western Sweden. And Danish traders would bring grain and manufactured goods.231

Travelling through communities these rural traders also spread information such as news of political occurrences, the prices of goods in other places and the new ideas and trends in consumption.232 Peddlers also played a special role in rural women’s consumption. Since rural women tended to be more tied to the land than men, who travelled more for their pluriactive work, the peddlers who arrived at the doorstep presented one of the few opportunities in which women could decide for themselves what to buy.

3.3.2c Fairs

Seasonal fairs are amongst the oldest forms of trading in Europe, and have played a crucial economic and social role in the internal distribution of goods as well as internal market formation. At fairs, merchants as well as rural and traveling traders from different regions and countries could sell their goods or fill up their stores, and households would buy necessities and goods from faraway places to last them until the next market. They were also meeting places in which information was exchanged, deals were made and new trends introduced and disseminated, and no doubt these fairs were an enjoyable and stimulating interruption to the mundanity of everyday life.233
Norwegian fairs have a long tradition, with some originating as far back as the Viking age. No study has been undertaken about their role in the Norwegian economy or internal market formation; however it is known that the largest fairs brought together traders and customers from all over the country. Horse and cattle traders from Gudbrandsdalen or the inner fjord areas of western Norway would cross the mountains to sell their animals at markets in Eastern Norway or Trøndelag, and from there they spread further, even into the eastern regions of Sweden. Pedlars even came from neighboring countries, such as the Swedish “kramkarar” who sold Swedish iron and textiles at many of the largest Norwegian markets. A local history study made of goods sold at Levangermarknaden in Trøndelag shows that much of what was traded between Norway and Sweden were grains, malt, fish of different sorts, iron and copper tools and utensils, iron, meat and butter, woollen textiles. These goods would be purchased by households or their representatives, but also by Norwegian bissekremmere, and in this way spread further throughout Norway.

As suggested earlier, the fairs were also places for socializing and fun. Examples of this is also found in Norway, such as Momarkedet, a large fair in eastern Norway, which lasted for eight days *but stays in peoples mind all year*. Here dancing, fashionable the polka during the late 18th century, horse racing, wrestling and drinking took place. There were even carousels. In this way then the Norwegian fairs clearly offered a welcome break to the drudgery of everyday life along with the possibility for experiencing new and exciting things, which, as the quote above indicates, would often stay with them all year.

237 These had been taken as booty from Sweden in the 1788 war, but were supposedly common in Russia. The carousel was looked like a four armed windmill turning on an axle with person sitting or standing on each. When the axle turned the arms went up and down, as well as round. Source: Wilse, J. N.: *Eidsberg, TJ*, hefte 16, 1796, p. 14.
Table 3.2: Changing number of large seasonal fairs in Norwegian regions from the start of the eighteenth century to 1840.

<table>
<thead>
<tr>
<th>Region</th>
<th>Start of eighteenth century</th>
<th>End of 18th century</th>
<th>1840</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Norway</td>
<td>11</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Southern Norway and Telemark</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Western Norway incl. Møre</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Trøndelag</td>
<td>5</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Northern Norway</td>
<td>5</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>22</td>
<td>27</td>
</tr>
</tbody>
</table>


In the long eighteenth century fairs became increasingly regulated. Their frequency was set at no more than twice a year and the duration from 3-5 days. This increased predictability, made it easier for buyers and sellers to find each other, as well securing the best possible prices. However, as table 3.2 shows, there was a decline, or stagnation, in the number of seasonal markets in the most populated areas of the east, south and west of Norway, while less populated Northern Norway experienced an increase. Andreas Holmsen attributed the latter’s rise to the increasing economic activity in the region from the early 19th century, but to understand the former’s decline one must look to the growth of small towns as well as to the spread of new retail forms.

### 3.3.2d The growth of small towns

Using a strictly demographic approach to urbanization, most Norwegian urban centres would not be included in the counts of European urban areas. These define a small town as comprising between 5 000 and 10 000 inhabitants, while in Norway in 1800 no town was larger than 20 000 inhabitants. Only five had more than 5000 in 1801 (Bergen (19667

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persons), Christiania (9211 persons), Trondheim (8847 persons), Kongsberg (6811 persons), Drammen (5428 persons), the remaining 25 urban areas with town privileges had far fewer inhabitants, some with as little as 350 in 1801. This demographic way of defining urbanization is lacking in precision when applied to Norwegian communities, and a “functional” approach is therefore more illuminating.

By a functional approach it is meant that a settlement is defined according to whether it functioned as an economic, administrative and social centre for its hinterland; if its economic structure was dominated by secondary and tertiary production, and if the housing was arranged in a clustered pattern. Seen from this angle, even the smaller urban settlements tended to fulfill the same criteria as the large and privileged towns. Using this approach, the process of early modern urbanization appears to be strong in Norway; with the number of people living in urban centers fulfilling the functional criteria multiplied by more than five. The number of towns tripled; from 11 in 1560, to 18 in 1665, 32 in ca. 1800 and 34 in 1825. Also the share of the population living in urban settlements rose; from 6-8 percent in 1560, to about 11 percent in 1800 and 1825.

Most of the new towns were export towns (ladested), the second rank in the town hierarchy. They were under the jurisdiction of the chartered towns and merchants in these export towns had to gain trading privileges from these. The growth of these towns should be seen in light of the growing Norwegian exports and attempts at curbing illegal trade. They were usually located at places along the coast such as river outlets or natural harbors which provided easy access both to foreign markets and rural producers. Compared to the chartered towns which drew a more varied group of producers and consumers, the economic activities of the smaller urban settlements were closely tied to the most dominant sector of the region; for example Fredrishald (Halden) was linked to timber, and Egersund to fish. The few towns established

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239 It should be noted that even if the towns were small in a European context, many of the largest Nordic towns after the capitals were Norwegian, such as Bergen, Trondheim and Kongsberg.; Digitalarkivet.no: 1801- census.; Helle, K., F.-E. Eliassen, J. E. Myhre and O. S. Stugu: 2006, p. 203.
inland, such as Kongsberg and Røros were linked to mining and metal works. Through the
exports the small towns connected Norway to the European, and especially the north-western,
trading system. In this way the export towns were out channels for Norwegian produce like
timber and fish, metals and other goods destined for the European market.

The export towns were also important channels for foreign and new goods to enter the
Norwegian market. Officially an export town could only import grain from Denmark, whilst
all other imports had to pass through a chartered town. However, coinciding with growing
exports, many export towns were given import rights from the mid eighteenth century,
making the difference between the two rather blurry. Lacking a study of smuggling to and
from Norway in the early modern period it is nevertheless plausible that the export towns
were also common channels for illegal imports or the smuggling of goods. From the export
towns the foreign goods were spread to rural areas by rural peddlers or as part of the
traditional farmers’ trade.

There was also an increase in smaller settlements such as coastal villages (strandsted) which
were small urban settlements along the coast that had no formal trading rights, but which
functioned as local trading places for legal (and illegal) goods. The few that can be considered
towns became export towns towards the end of the eighteenth century. Mining towns
(bergsteder) were established in the wake of the growth in mining and metal works in the last
part of the 17th century and were similar to the mining towns in central Europe in their one-
sided sectored focus and separate juridical structure. There was also urbanization in the form
of smaller non-agrarian urban settlements such as suburbs to some of the towns.

The small settlements came to function as channels for interregional trade. Through their
unique position they facilitated the easier entry of Norwegian produce into the European

242 Eliassen, F.-E.: ”The mainstays of the urban fringe: Norwegian small towns 1500-1800” in Clark, P.: 1995.;
243 Eliassen, F.-E.: Norsk småbyføydalisme? Grunneiere, huseiere og husleiere i norske småbyer 1650-1800,
Hifo, 1999.; Eliassen, F.E.: ”Port towns, privileges and changing fortunes. Mandal and its’ hinterland, c. 1650-
1850”, in Eliassen, F-E, J. Mikkelsen, B. Poulsen: 2001.; Helle, K., F.-E. Eliassen, J. E. Myhre and O. S. Stugu:
2006, p. 146.
market, and were entrance points for foreign goods to be circulated in rural Norwegian regions. This spread of smaller urban settlements where trade (both foreign and domestic) took place, also meant that the number of places to trade increased. This meant that the distance required to travel to a legal market to sell or purchase goods decreased for many households. Also, unlike the fairs, which were seasonal, the towns were open for trade all year. In this way a household could make its purchases as and when required, rather than only during the few days in which the market or fair took place. In this way the small towns, especially in Eastern, Southern and Western Norway, took over the functions of the old fairs, but simultaneously expanded the access to the market. Additionally, the growing urban population increased market opportunities for producers in rural areas who could be more certain that there would be customers for their goods. This increased contact with sales outlets and merchants stores in towns made households more aware of the variety and selection of goods available, and thus helped build consumer aspirations.

3.3.3 New retail forms: Guesthouses and rural shops

Gradually, new retail forms such as guest houses, rural shops, newspaper adverts and auctions spread into rural areas. That businesses catering for travelers increase, confirms that domestic trade was growing and that travel between regions grew. These new retail forms also played a significant role in spreading goods between regions, and even countries and continents in the domestic market during the eighteenth century by moving the market closer to the household. This enabled a more regular supply of goods than the fairs and town trips could offer. It also meant that less planning was required before purchases, and that fewer resources had to be tied up in stores of food or other goods necessary to last until the next purchasing opportunity. In this way the new retail forms enabled purchases to be more precise according to the household’s requirements, and this precision sometimes resulted in there being a little extra cash for non-essential goods. The new retail forms were also places where deals were brokered, information and gossip was exchanged, where traders resided, and social activities and even auctions took place.244

3.3.3a Guesthouses

The oldest of these new trading forms were the guesthouses. They were formally established in 1648 as a part of skyssvesenet and should provide food, ale, bed, fire, light and other necessities for the reasonable price of 12 sk for the midday meal and 16 sk for lodging and an evening meal. Their very existence, as well as the formalization of the skyssvesen shows there was a rise in domestic travel. Gradually guesthouses became important retail channels, and by the 1740s some guesthouses were also licensed shops or practiced other trade activities, even if most were not allowed to sell beer, spirits or other strong drink to other than travellers or to locals purchasing to consume at home. The aim of this law was to restrict alcohol consumption, but it was apparently unsuccessful since they were granted restricted trade privileges in 1784. These included the sale of “necessities” such as tobacco, coffee and sugar from the Danish/Norwegian colonies, as well as alcohol and grain (often of Danish or Schleswig-Holstein origin) to both travellers and to the local community.

The expansions of the guest house privileges saw a dramatic increase in legal sale outlets for necessities, but also for new goods of exotic origin and with addictive properties. The guesthouses’ location at regular intervals along the most trafficked and populated parts of the country made them effective channels to spread new trends. Contemporary officials would sometimes complain of how guesthouses tempted the population to drink and engage in other “wasteful” activities, but because of their importance for trade little was done to restrict them.

Contemporary surveys of the Norwegian guesthouses indicate that their spread was closely linked to trade. They first appeared along southern and western coast, on the approach to

245 Res. 24/12 1648, §7 and 8 in Wessel-Berg, F.A.: Rescripter.
Bergen and Trondheim and were located at old trading sites (kremmerleier). A survey of guesthouses executed in 1748 (see table 3.3) for the Rentekammer shows there were 641 guesthouses in Norway (Nordland and Finmark in Northern Norway not included). Inaccuracies are probable, but judging from the regional distribution in the survey, guesthouses were most frequent in coastal areas. This coincides with the sea being the dominant form of domestic transportation.

Table 3.3: Guesthouses and guesthouses with trade privileges, Norway 1748. (Finmark and Nordland in Northern Norway excluded).

<table>
<thead>
<tr>
<th>Area</th>
<th>Guesthouses</th>
<th>Guesthouses with trading privileges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akershus amt (Eastern Norway)</td>
<td>139</td>
<td>0</td>
</tr>
<tr>
<td>Ringerike, Hallingdalen, Eiker og Buskerud amt (Eastern Norway)</td>
<td>42</td>
<td>33</td>
</tr>
<tr>
<td>Smålenenes amt (Eastern Norway)</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>Bratsberg amt (Eastern Norway)</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Nedernes and Rabygdelaget amt (Southern Norway)</td>
<td>31</td>
<td>56</td>
</tr>
<tr>
<td>Lister og Mandals amt (Southern Norway)</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Stavanger amt (Southern Norway)</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Bergenhus amt (Western Norway)</td>
<td>76</td>
<td>92</td>
</tr>
<tr>
<td>Romsdals amt (Western Norway)</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>Trondheims amt (Trøndelag)</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td>Romsdals amt (Western Norway)</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>423</td>
<td>218</td>
</tr>
</tbody>
</table>


Guesthouses usually had a drinking room, a house for sleeping, a boat house or a stable and sometimes even a wine cellar. Guesthouses with trading privileges functioned as rural shops as they were permitted to sell a wide range of necessities including grains, tobaccos, textiles like linen and hemp, rope, fishing tools, iron and steel goods, syrup, ink powder, hides, woollen hats, soap, needles, planes, guns and gunpowder, domestically produced stoneware, bread, beer, pipes, almanacs, books, compasses and charts, and wood for building houses and boats amongst other things.250 These were all things for which rural people had previously needed to go into town to buy, and so the privileged guesthouses brought such items closer to the households. Guesthouses with trading privileges would also have a shop, perhaps a bakery, and, along the coast, a smoking house and drying racks for preparing fish, as well as buildings and tools for repairing nets and fishing equipment.251 Those located along the busiest coastal trade routes could bustle with activity and international influences. An example of this was the guesthouse in Merdø which the Icelander Arni Magnusson visited in 1753 in which there were:

many [sailors] from England, Amsterdam, France and Portugal gathered. People sat around 3 tables. The drinks were French spirits and English ale at 2 mark a pot, [also] coffee, good food sprinkled liberally with sugar and ox soup… and we made merry by playing cards for money and chess.252

In the 17th century guesthouses were perceived as serious competition by the town merchants who repeatedly complained about infringing activities occurring in these trading places, but over time merchants along the western and southern coast had managed to gain control of the guesthouses by expanding the chartered towns’ privileges.253 In Bergen’s privileges from 1702 town merchants were allowed to own rural guesthouses and were granted a monopoly on trade in its vicinity. In the Christiansand privileges of 1739 town merchants could establish rural shops or sales outlets where needed, and the Trondheim privileges of 1732 opened for

merchants (called utliggerborgere) to trade in Northern Norway in the three summer months (in reality this soon became year-round). These functioned as extensions of the town trade. In this way they controlled sales to the rural population. But more important for many, the monopoly rights of purchasing fish and timber from locals also gave them control of the supplies to the export sectors. In places with little competition this easily led to a debt cycle in which necessary goods like grain or tobacco were paid for with future catches of fish. These traders were often called small kings (småkonger).

Far less is known about guesthouses in inland Norway. Table 3.4 shows that inland regions (the first four regions in the table) had fewer guesthouses with trading privileges than the coastal ones. Their spread appears to be linked to old inland trade routes, proximity to markets and the expansion of the timber trade. In inner Telemark (inland eastern Norway), the priest Hans Jacob Wille reported that even though there were guesthouses every mil (10 km), these were all in a poor state, with the exception of Moen by the main church where the keeper Hr. Jacob Wilhelm Heck is supplied with all... making it the best guesthouse in Øvre Telemark. The main church was of course one of the more frequented places in the parish, making it a profitable location. Similarly the number of guesthouses in Hedemarken rose from three to five in response to increased travelling. As there were fewer complaints about inland guesthouses they appear to have been less in conflict with the town merchants. It is possible they had better control of the hinterland, but it is equally likely that rural trade had little significance until the timber trade had begun turning its attention to the interior areas.

3.3.3b Rural shops

In Norway, rural shops began spreading gradually from the mid eighteenth century as the economic conditions changed and increased demand for permanent retail outlets in rural areas. In the early eighteenth century in the South, West, and parts of Northern Norway, the chartered town privileges opened for merchant controlled rural shopkeepers (landkremmere).

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In Eastern Norway they had existed from at least the beginning of the century, but they were only made legal in 1753. Afraid of losing customers the Akershus stift town merchants managed to restrict the number of rural shops to seven, and insisted they were privileged merchants who bought all their goods in town. Rural shops in Eastern Norway were allowed to trade in:

- fulled wollens (Stammet), baize, felt (filt), black cloth, hats, calamanco, flower patterned ribbons (florettes-bånd) and other linen ribbons, rough lace, cotton, rough plain woven cloth, thread, as well as silk and woollen yarn. All sorts of iron goods (isenkram) for the farmer’s household’s daily needs or for his livestock and land; all sorts of spices like pepper, ginger, raisins; tea, sugar, coffee beans, paper, soap, salt and tobacco, as well as all sorts of dye. They should not trade in velvet and silk goods, fine lace or fine cloth, only with black cloth. Nor with Nuremberg goods or similar items which the people do not need and which would only lead to wastefulness in dress or unwise spending of money.\(^\text{257}\)

The selection of goods connected consumers and producers from different parts of Norway, as well as global regions, aiding the development of both a domestic, as well as a world, market.

Along the coast, rural shops would also purchase rural produce, or often agreed to take it as payment for goods bought. This reduced the distance which rural people had to travel to the market to sell their goods, but in many cases the rural shopkeeper was also an agent for timber merchants based in town, placing him in a position of power. Farm produce such as cheese or meat and cottage industry products such as knitted hats were similarly sold or bartered to the rural shop. Also the future promise of work-hours was used as payment. Rural farmers living

\(^{257}\) Res. 3.2 1743 § 5: maae de ei handle med andre Sorter, end stammet, Bai, filt, sort Klede, Hatte, Calemanker, Florettes Baand og andre linnede Bændler, grove Kniplinger, Cattun, grove Lerredser, traad, saavel af Silke som Limned of uldent Garn; alt Slags Isenkram som behøves enten til Bondens daglige Husholdning eller til hans Avl og Jordbruk: Thee, Sukker, Caffebønner, Papir, Saape, Salt og Tobak, samt alle Sorter Farver; derimod maa de ingenlunde handle med fløyeler, Silke-Varer, fine Kniplinger, fine Klæder uden sorte alene, ei heller med Nürenberg –Varer eller andet saadant, som Almuen ikke til Fornødenhed behøver, og hvorved den ikkun enten til Overdaadighed i Klædedragt eller anden ufornoden Penge-Spilde kunde forfores”. in Wessel-Berg, J.A.: Rescripter.
within the circumference of mining or smelting towns and thus required to drive or provide
firewood, were often paid in goods from the shop rather than cash.258

Quantifying the spread of legal rural shops in Norway in the eighteenth century is difficult
due to the lack of sources; however, an estimate is possible. The 1748 survey of guesthouses
noted in table 3.3 shows there were 218 guesthouses which also had shop outlets, but to this
total seasonal shops in Northern Norway as well as illegal shops should be added. All together
the total number of rural shops was likely to be less than 300, of which the majority were
located on the coast in Southern and Western Norway. Divided by the population in 1750
each shop would serve on average 2060 persons, which is far more than the average of 42 in
England in 1759, or 106, 9 in parts of Massachusetts which other studies have shown.259

The shop estimates for Norway nevertheless appear reasonable when compared to the 466
rural shops registered in 1825, 457 in 1845 and 502 in 1850. P. A. Munch argued that the
slow spread was because rural shopkeepers demanded higher prices than in town, but also that
town trips were an integrated and celebrated part of many rural people’s lives which they
were reluctant to give up.260 From this perspective, rural shops functioned as supplementary
ways to access goods or purchase smaller quantities of things they had run out of or needed.

Guesthouses and rural shops not only provided necessities and goods, but were also important
social meeting points. Andreas Holmsens study of the accounts of a guesthouse keeper in
Elverum show that many of the purchases were not just of necessities, more were of drink.
P.A. Munch found similar conditions in rural shops in the late nineteenth century, and he
emphasized their function as social meeting places for the men in a community, where
miscellaneous topics were discussed and opinions were exchanged. In this way guesthouses
and rural shops helped spread information and ideas but they could be equally effective in

(Eds.): 1996.; Berg, B. I.: Glemt mennesker, Bergmannslekten Bratteberg på Kongsberg 1742-1812, Novus
spreading gossip and enforcing social norms.\textsuperscript{261} Through their social function they also fulfilled the rural equivalent of the clubs and societies found in towns and frequented by the urban elites.

Even if it is difficult to determine whether the rural shops and guesthouses were established to meet rural demand, or whether it was motivated by merchants’ wish for control over rural resources, the increase and variety of goods which these new retail forms offered made it easier and more tempting for rural households to engage in the market. That people were able to buy their goods closer to the home also increased the predictability and availability of the developing internal market. They also increased the selection of goods that were readily available for households, making them more conscious of what it was possible to consume, and thus helping to stimulate consumer aspirations.

### 3.3.3c Other new retail forms

Newspapers gradually spread in popularity with the Norwegian population in the last part of the 18\textsuperscript{th} and early 19\textsuperscript{th} century. These were both of Danish, and Norwegian, origin, the latter being printed in a growing number of Norwegian towns. The papers had subscribers, some of them in large parts of the country, but their actual readership was likely to have been higher, and it has been estimated at 5-10 percent of the adult Norwegian population, a dramatic rise from the 1 percent estimated for 1720.\textsuperscript{262}

Adverts in newspapers played a significant role in the development of internal markets since they helped spread information about prices, trends and the availability of goods to a wide range of people, as well as geographical areas.\textsuperscript{263} Ordering items could be done either by mail or through friends going to town. No studies have been conducted on eighteenth century advertisements in Norway, however, looking through issues of the Norwegian newspaper

Norske Intelligenssedler in 1763, 1773 and 1823, as well as Bergens Adressecontoir 1777-1804 show that both large and small scale merchants, rural farmers and individuals used advertisement to reach potential customers.\(^{264}\) Within three months of its first issue, Norske Intelligenssedler was available for subscribers, even at the post office in Kristiansand (Southern Norway). To those living far from a post office or rural sub-office, the newspapers were sent as budstikke, an old relay system for passing messages from farm to farm. Thus even if the paper arrived late and somewhat crumpled from its prior reading, at least households in remote parts of Norway could stay up-to-date about new products and purchase what they wanted, assuming they could afford it and that it was still available.

The second hand market also played an important role in developing an internal market.\(^{265}\) In particular probate inventories and the subsequent related auctions, bankruptcies, and wholesales were important instances in which this occurred. No systematic analysis has been made of this in Norway, but studies in Sweden, as well as isolated studies in Norway, show that such events helped disseminate items to a wide selection of new people.\(^{266}\) Goods people otherwise might have had limited access to, or simply desired more of, could be inherited or bought at a good price. Auctions resulting from bankruptcies are found both in rural and urban areas, whilst auctions to sell large stocks were more common in towns.\(^{267}\) The auctions of wealthy people were known to draw large crowds, even from distant communities.

### 3.4 Conclusion

In the process of regional integration taking place in pre-industrial Norway, practical solutions to geographical obstacles and changing judicial institutions as well as new retail forms played a central role. The gradual development of transport and communications infrastructure helped reduce transaction costs, increase predictability and extend the reach of

\(^{264}\) Bergens adressecontoir, Bergen, 1777-1804.; Norske Interligenz-Seddler, Christiania, 1763, 1773, 1823, Online: www.nb.no/avis


\(^{267}\) Hutchinson, A.:” Skifter: kildekritiske synspunkter”, in Marthinsen, L.: 1996, p. 34.
the market into new areas. Similarly the gradual relaxing of trade laws helped expand inter-regional trade both by increasing the availability of trading places, as well as the number of traders. This also made households more aware of the selection of goods it was possible to consume, and so helped create consumer aspirations.

Also new retail forms helped integrate regions as they moved the market closer to households. Together the easing and expansion of legal trading possibilities functioned as an increase in channels for goods from different regions to reach new markets, making market participation both as producer and consumer easier and more profitable.

It is important to emphasize the interconnections between urban and rural trade to understand the knitting together of the Norwegian regions. Urban centers, both large and small depended on rural areas for supplies of necessities and goods for the export trades. At the same time guesthouses, rural shops, peddlers and also the traditional farmers’ trade depended upon the urban centers and merchants for access to both necessities and goods. In this way a system of customer/retailer relationships developed; crossing national, regional and urban/rural boundaries which expanded the market and brought it closer to households, in some cases right to the doorstep.

Norwegian regional integration in the 18th century, and even far into the 19th century, was never so developed that households could fully rely on it to provide all necessities. As such it cannot be claimed that there was a fully developed and functioning internal market in the pre-industrial period. The changes taking place should nevertheless not be perceived as insignificant. In fact quite the contrary. The gradual development of transport infrastructure, institutional development and new retail forms helped expand the domestic market by tying the Norwegian regions closer together, as well as strengthening their connections with regions outside its borders. In this way important foundations for the onset of the later Industrial Revolution as well as the spread of the modern world economy were established.
Chapter 4: Rural households’ allocation of resources and material wealth

At the basis of economic change lie decisions made at the household level regarding the allocation of resources or the investment of wealth. It is when many households make similar decisions concerning productive activities, market participation, investments of wealth and consumption that economic development occurs. Identifying such change is challenging for the pre-industrial period, but using a combination of sources relating to the household level it is possible to understand more and identify trends which can help answer questions such as: what influenced households allocation of resources? What do incomes and material wealth reveal about households economic activities and conditions, needs and aspirations, and the relation to gender and wealth groups? How did market participation impact on this, and how do the Norwegian results compare with similar studies made in other countries?

Studies of long term economic growth and development have tended to emphasise changes at aggregate levels, as well as in production. In recent decades Jan De Vries’ concept of “the Industrious revolution” has received much attention for its emphasis on consumer demand in motivating households’ re-allocation of resources towards increased market participation. It is defined as “a consumption driven commercial phenomenon that preceded and prepared the way for the Industrial Revolution, which was driven by technological and organisational changes”. Central to this was households’ responses to changing conditions in the market, as well as consumer aspirations. This increased market integration through agricultural specialisation, early-modern industrial production, growth of wage labour, and increased labour supplies. Focusing on the latter De Vries argued that this was achieved through utilising previously unused labour resources; more specifically women and children of the household. Was there an increase in production enabled by new labour resources? In what

271 In accordance with Chayanovs theory of the peasant economy households productive capacity and consumption needs would have varied over time depending on the gender and age of the households members. Chayanovs theory will not be focused upon here as it was made for peasant households which were mostly self-
way did market integration influence these changes? And were consumer aspirations also what drove rural Norwegian households?

This chapter looks first at idealised contemporary budgets in order to capture a glimpse of households’ choices concerning resource allocation. The second part focuses on material wealth as indicated by probate inventories and will discuss wealth distribution, as well as how households’ material wealth could be tied up in different sorts of goods. The third section compares the Norwegian finds with international results. The budgets and inventories come from six rural communities connected to the market in different ways. Map 4.1 shows their location.

4.1 Norwegian rural farmers’ annual budget

Household budgets have proven to be invaluable sources for the study of household resource allocation in other European countries.272 Unfortunately no Norwegian 18th century farmers’ accounts are known to have survived.273 Instead one has to make do with three idealized budgets to capture a glimpse of how rural farmers households in communities connected to the market through timber, grain and fishing sectors may have allocated their resources. These were made by contemporaries to show the typical resource allocation of the majority of farmers in a community or region. Comparing the three budgets is problematic. They do not follow the same form, were made with a gap of around 25 years between each other, and deal with households relying on very different natural conditions. They can thus only be used to indicate commonalities.

sufficient. As this thesis focuses on households increasing market participation, the theory is less applicable. Chayenov, A.V., D.Thorner, R. E. F. Kerblay (Eds.): A. V. Chayanov on the Theory of peasant economy, Manchester University Press, Manchester, 1966.


273 I have gone through the catalogue of private archives in the State Archive in Oslo which covers Eastern Norway. The content of each private archive is not always detailed, and farmers’ budgets from the period are not noted. Farmers’ archives may be found in one of the other State archives; however, practical considerations have made these impossible to follow up. Also, no Norwegian secondary literature which I have discovered mentions the existence of any household budgets. This is not to say such budgets did not exist, but I have not encountered any in my research.
Map 4.1: Communities studied.
The authors of these budgets were local state officials, writing as part of a contemporary debate on social and economic conditions in Norway. Working with the three budgets it must be acknowledged that the participants in these debates had their own agendas when writing, such as impressing upon their superiors the harsh working conditions, or in advertising their own analytical skills, perhaps in the hope of attaining a better position. The budget by Axel Smith was part of a topographic description of his parish Trysil, located in the mountainous inland region, and was created to illustrate how much of a household’s resources were wasted on tobacco. Parson J. R. Wilse’s budget published in 1779 was part of a topographic description of Spydeberg in Eastern Norway. The third budget, made by Melchior Falch, concerns Sunnmøre, a region on the western coast of Norway. It was part of a proposal for renewing the land taxation system. The budgets were idealized and designed as examples. The three budgets do not reflect actual spending and income, nor do they include estimates of unforeseen events such as storms, or expenses incurred only a few times in life, such as housing or weddings. Smith, Wilse and Falch all emphasized that items considered by them as non-essential for the household had been excluded. Therefore the budgets cannot provide an accurate picture, and can only really help draw an impression of a households’ resource allocation.

The regions which the three budgets cover vary greatly. The climate in Trysil is harsh, limiting grain production to the bare minimum and requiring households to depend on the market for grain, making husbandry the dominant agricultural activity. The population of Trysil increased fourfold between 1665 and 1800, at which point it made up 1597 persons spread throughout 97 farms. This was enabled by increased agricultural production, as well as profits from increased participation in the timber trade which spread to this region of Norway (Østerdalen) in the second half of the 17th century. The timber trade’s share of Trysil’s income rose from 0 percent to almost 40 percent through the 18th century, but husbandry throughout the period remained the main source of income. Landownership in Trysil rose from 10 percent

275 He was also an active naturalist, corresponding with the botanist Carl von Linné in Sweden and he preformed the first systematic meteorological measurements for Norway.
at the start of the century, to 85 percent in the mid 18th century, and declined to 50 percent after 1790. The decline occurred as demand for timber created high prices for forested land, tempting farmers to sell their land to merchants to profits.277

The geographical conditions at Spydeberg favoured grain production (especially oats), making this the largest income providing activity. Spydeberg was located only 50 km from Christiania, and thus had a far closer relationship to the urban market than both the community of Trysil and the region Sunnmøre (discussed next). It is also not far from the Swedish border. In 1801 1944 people were registered in the community, living on 138 farms. The cotter institution was well established in Spydeberg, and they formed a significant share of the work force. Deforestation in some parts of the community forced some households to purchase their fire wood, which in other places was available from the commons.278

Sunnmøre, on the other hand was a region. It spans over a larger area than both Trysil and Spydeberg, and thus not directly comparable in size. The geography of Sunnmøre varies from isles to mountainous fjords. For the most part the agricultural conditions were relatively good, enabling self-sufficiency in grain, dairy and meat. Agriculture was the mainsta, but households in the inner parts could also engage in the timber trade. All fished, but households on the outermost isles were the most specialized in this, sometimes at the expense of the grain harvest. The population of Sunnmøre rose slowly from 15 780 in 1701 to 22 597 in 1801. Part of this was enabled by increased agricultural efficiency in some communities, especially those in the fjords, as well as opportunities arising in fishing along the coast. But significant migration had also occurred from the fjord regions where competition for land resources had increased to urban areas like Bergen, or the coast. The population growth stagnated in the last decades of the 18th century when the fishing bonanza of the mid century declined. Sunnmøre was progressive in the long 18th century; the most profitable example were the Scottish merchants, who in 1737 established clip fish production in Molde, a small urban centre just north of Sunnmøre. Their technology, together with larger boats and the shifting from lines to


Hutchison, Ragnhild (2010), In the Doorway to Development: An enquiry into market oriented structural changes in Norway ca. 1750-1830
European University Institute
DOI: 10.2870/19493
nets spread into the region. These changes often required larger financial investments and resulted in the consolidation of capital in fewer hands. Tenancy was widespread well into the 19th century.279

4.1.1 Incomes

Table 4.1 show the idealized budget made by the local parson Axel Smith for what he perceived to be an average farm household in the mountainous inland community Trysil in around 1784.280 It was taxed one hide281, and engaged in pluriactivity to provide it with enough income to put food on the table. In addition to the animal husbandry and meagre grain production, it was engaged in timber. Production of grain, livestock, textiles or other goods by the household for its own use was not included.

Developments in transport infrastructure enabled rural communities like Trysil to take part in the international timber trade, and this became a vital activity for many.282 Its importance was reflected by the 82 percent (table 4.1 ) it constituted of the income in the idealized Trysil household budget. Smith noted that participation in the timber trade had helped support population growth, but that it had been at the expense of grain production for self-sufficiency. This was partly because the men worked in the forests, but also since hauling the logs exhausted the horses, thus making them unable to plow.283 As international demand for timber fluctuated, so did the timber prices, and so consequently the income of households involved in


281 Taxation of farms was based on their yield of grain, number of animals it could support and sometimes also forest and grazing land. The farms had been evaluated and set tax on during the period 1665-70, and were not adjusted until 1818. Any improvements or changes in the farm thus did not influence the taxation level of the farm. Land taxation is thus not a useful source to capture economic change. Axel Smith used 1 hud (hide) as the definition of an average farm tax in his community, however how productive this would have been, is not possible to determine. The use of a hide as a term of payment is typical of areas where they in the 17th century would have paid taxes in hides (or butter). Towards the end of the 18th century taxes were increasingly paid in money.


this trade. With such a large share of the income coming from timber, households were financially extremely vulnerable.

Table 4.1: Average annual budget for a farm taxed at one hide, in Trysil parish made by Axel Smith.

<table>
<thead>
<tr>
<th>Incomes</th>
<th>Rdl</th>
<th>Share</th>
<th>Expenses</th>
<th>Rdl</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 tylfter (dozen) pine timber at 4 ½ rdl:</td>
<td>90</td>
<td>82</td>
<td>Taxes and similar expenses:</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Butter, talloww, game etc.:</td>
<td>20</td>
<td>18</td>
<td>To the Ting, clergy, tiethe:</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 barrels grain, incl. transport at 4 rdl a barrel (much of this was used to pay workers during the harvest):</td>
<td>80</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Servants wages:</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Salt and herring:</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tobacco and artisans:</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Expenses to general commodities, for travel:</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total:</td>
<td>110</td>
<td></td>
<td>Total:</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>


As in other mountainous communities, animal husbandry in the form of dairy and meat products played a key role for households, constituting 18 percent of the income. These goods were supplied to the gradually developing inter-regional domestic market. Both dairy and meat were brought from Trysil to seasonal fairs at Elverum (a few days south of Trysil by foot) or Røros (a few days walk north of Trysil), and from there spread to other regions. Smith also noted that frozen fish\(^{284}\) was produced by the people of Trysil, and sold at the same inter-

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\(^{284}\) The cold winters in Trysil enabled the population to put the freshwater fish caught in winter in snow to sore it. The snow froze the fish, and it remained frozen until spring. Unless there was a thaw, the fish could be sold at one of the seasonal fairs held in wintertime.
regional fairs. It must nevertheless have been relatively small as Smith does not note it specifically in his budget.

Table 4.2 shows the idealized budget for the whole of Trysil parish. It confirms the importance of timber, as well as dairy and meat, estimating their value at the parish level to be respectively 86 percent and 11 percent of the income. Since the budget is aggregated it also reflects incomes from other work activities, such as carting for the mines at Røros and textile production, even if these were only estimated to be 1,5 percent each. It should be noted that the latter category would cover about half the households’ expenses for church tithe (tax) and other communal taxes. Local production intended for local consumption was not included in the budget.

<table>
<thead>
<tr>
<th>Income</th>
<th>Rdl</th>
<th>Share</th>
<th>Expenses</th>
<th>Rdl</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butter 100rdl, tallow 100rdl, fish 50rdl, game 200rdl, hides 350rdl</td>
<td>800</td>
<td>11</td>
<td>1.500 td grain (not including the 2 barrels they grow themselves. Transportation costs also not included)</td>
<td>6000</td>
<td>86</td>
</tr>
<tr>
<td>Timber (approximately)</td>
<td>6000</td>
<td>86</td>
<td>100 mats Dutch tobacco</td>
<td>500</td>
<td>7</td>
</tr>
<tr>
<td>Sale and carting of coal to Røros by the northern most farms</td>
<td>100</td>
<td>1,5</td>
<td>Iron, iron items, lead, salt, herring, gun powder:</td>
<td>300</td>
<td>4</td>
</tr>
<tr>
<td>Household industry like spinning wheels, scissors etc.:</td>
<td>100</td>
<td>1,5</td>
<td>To the church and clergy (parson, parish clerk and schoolmaster):</td>
<td>200</td>
<td>3</td>
</tr>
<tr>
<td>Total:</td>
<td>7000</td>
<td></td>
<td>Total:</td>
<td>7000</td>
<td></td>
</tr>
</tbody>
</table>

1 td= 1 barrel
1 mat= a measurement for tobacco (how much has not been possible to discover)
Table 4.3: Average annual budget for farm taxed one skipund, Spydeberg parish, by J.R. Wilse.

<table>
<thead>
<tr>
<th>Income</th>
<th>Rdl-Mk-Sk</th>
<th>Share</th>
<th>Expenses</th>
<th>Rdl-Mk-Sk</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sowing 15 barrels of oats, 5 fold yield, at 5 mk a barrel</td>
<td>94</td>
<td>52</td>
<td>Grain seed valued according to previous tax:</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Half a barrel of barley, 7 fold yield, at 2 mk a barrel</td>
<td>7</td>
<td>4</td>
<td>Grain for the farmer and his wife, 3 children, 2 servants eating daily:</td>
<td>97</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>at least 3 ½ skl. The same for the cotter when he works on the farm (2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>days a week at least). Altogether 2659 days of eating at 3 ½ skl amounts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>to 96 rdl 3 mk 18 ½ skl:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of rye, wheat and peas (altogether 1 barrel), 8 fold yield, at 8 rdl</td>
<td>32</td>
<td>18</td>
<td>Meat from the farms livestock (not noted as an expense, see instead</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>income)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value of grain crop:</td>
<td>133</td>
<td>73</td>
<td>For ca. 75 maal slått and 10 mål skur which the household cannot</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>support itself, at 12 skl and food:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale of one cow or small ox annually at 9 rdl, 4 sheep at 4 rdl, 3</td>
<td>14</td>
<td>8</td>
<td>Salt herring from town:</td>
<td>5-1-0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>geese at 1 rdl:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 bpd butter at 5 mk from 8 cows, and 1 hide at 1 rdl:</td>
<td>6</td>
<td>3</td>
<td>Wages:</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Forestry for others:</td>
<td>24</td>
<td>13</td>
<td>Total of expenses for products:</td>
<td>146</td>
<td>86</td>
</tr>
<tr>
<td>Some loads of hay, game and cumin:</td>
<td>4</td>
<td>2</td>
<td>Remaining 35 rdl (21%) spent on:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total of the farmers income:</td>
<td>181</td>
<td></td>
<td>Taxes, kings tithe (tax) and military:</td>
<td>11-1-13</td>
<td>7</td>
</tr>
<tr>
<td>Judicial taxes:</td>
<td>4-1-0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clergy: 4 rdl 2 mk</td>
<td>4-2-0</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous taxes and fees like rents or land tax: 4 rdl</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total of other expenses</td>
<td>24</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total expenses:</td>
<td>170</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surplus:</td>
<td>11</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The budget for Spydeberg in table 4.3 covers the incomes and expenditures of a farm taxed at 1 skipund and was, according to Parson Wilse, a relatively average farm for the parish. The household consisted of the husband, wife, three children, two servants and a cotter who worked on the farm two days per week. The budget shows that grain constituted 73 percent of the household’s income. Oats were the main crop, followed by barley, but some rye, wheat and peas were also grown. Of these it appears that most were consumed by the household. When food expenses are subtracted the household had a 10 rdl profit from the grain production.

The budget shows that the household was also pluriactively engaged in other productive activities. Livestock and dairy provided only small shares of the income, the one cow slaughtered every year was for the households own consumption with only the hide and 5 bismerpund (12 lb)\(^{285}\) of butter being sold. Even if the incomes to the Spydeberg household were primarily agricultural, it also engaged in sales of hay, game and cumin to the market. These additional activities made up 28 rdl, or 15 percent of the household’s income, more than the total surplus.

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\(^{285}\) 1 bismerpund = 5.99 kg.
Table 4.4: Melchior Falch’s estimate of annual expenditures for a farm household taxed at 1 vog fish. Sunnmøre 1764.

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Rdl-mk-sk</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain (9 barrels wheat and 8 barrels barley or 21 barrels oats)</td>
<td>28-0-0</td>
<td>40,5</td>
</tr>
<tr>
<td>Syre (3 ¼ barrel)</td>
<td>4-3-12</td>
<td>2,5</td>
</tr>
<tr>
<td>butter (2 våg)</td>
<td>4-3-0</td>
<td>6,5</td>
</tr>
<tr>
<td>Dried ox meat (4 ½ våg)</td>
<td>3-2-4</td>
<td>5</td>
</tr>
<tr>
<td>Bacon (1 ½ våg)</td>
<td>3-2-4-0</td>
<td>5</td>
</tr>
<tr>
<td>Wool (61 mk)</td>
<td>3-4-14</td>
<td>5,5</td>
</tr>
<tr>
<td>Linen cloth (lærret) (66 mk)</td>
<td>2-1-14</td>
<td>3,5</td>
</tr>
<tr>
<td>Leather (24 mk)</td>
<td>2-3-0</td>
<td>3,5</td>
</tr>
<tr>
<td>Cheese (1 bpd)</td>
<td>0-1-8</td>
<td>0,5</td>
</tr>
<tr>
<td>Wage; 1 male servant</td>
<td>4-0-0</td>
<td>6</td>
</tr>
<tr>
<td>Wage; 1 female servant</td>
<td>2-0-0</td>
<td>3</td>
</tr>
<tr>
<td>1 barrel salt</td>
<td>1-5-0</td>
<td>2,5</td>
</tr>
<tr>
<td>Church tax</td>
<td>0-4-0</td>
<td>1</td>
</tr>
<tr>
<td>landskyld</td>
<td>15-12</td>
<td>3</td>
</tr>
<tr>
<td>tax</td>
<td>3-0-9</td>
<td>4,5</td>
</tr>
<tr>
<td>repairs</td>
<td>1-3-0</td>
<td>2</td>
</tr>
<tr>
<td>Wear on bedding</td>
<td>0-3-0</td>
<td>1</td>
</tr>
<tr>
<td>Wood for sledge/plough</td>
<td>0-3-0</td>
<td>1</td>
</tr>
<tr>
<td>Iron to plough</td>
<td>1-3-0</td>
<td>2</td>
</tr>
<tr>
<td>Pay for milling of grain</td>
<td>1-0-0</td>
<td>1,5</td>
</tr>
<tr>
<td>Hats for household</td>
<td>1-0-0</td>
<td>1,5</td>
</tr>
<tr>
<td>Total</td>
<td>68-3-6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income</th>
<th>Rdl-mk-sk</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oats (9 ½ barrels)</td>
<td>19-0-0</td>
<td>28</td>
</tr>
<tr>
<td>Barley (10 barrels)</td>
<td>14-2-8</td>
<td>21</td>
</tr>
<tr>
<td>Meat (1 ox)</td>
<td>4-3-0</td>
<td>6,5</td>
</tr>
<tr>
<td>Butter (15 bpd)</td>
<td>15-0-0</td>
<td>22</td>
</tr>
<tr>
<td>Syre (1 barrel)</td>
<td>3-0-0</td>
<td>4,5</td>
</tr>
<tr>
<td>Cheese (6 bpd)</td>
<td>1-2-2</td>
<td>2</td>
</tr>
<tr>
<td>Meat (5 calves)</td>
<td>0-5-0</td>
<td>1</td>
</tr>
<tr>
<td>Wool (72 mk)</td>
<td>4-3-0</td>
<td>65</td>
</tr>
<tr>
<td>Cuttings of wool</td>
<td>1-2-4</td>
<td>2</td>
</tr>
<tr>
<td>Sheep, slaughtered (2)</td>
<td>0-4-8</td>
<td>1</td>
</tr>
<tr>
<td>Swine, slaughtered (2)</td>
<td>3-5-0</td>
<td>5,5</td>
</tr>
<tr>
<td>Total</td>
<td>60-1-13</td>
<td></td>
</tr>
</tbody>
</table>

Source: Falck, M. in Døssland, A.: Heimen, 1/1983 (There appears to be a slight discrepancy between Falchs and Dosslands sums (summerising them later). For this reason Flachs have been used).

Melchior Falch’s budget (in table 4.4) is of limited use with regards to income from production. It was part of a debate on land and farm taxation and was made to illustrate the perceived potential production and consumption of what he defined as an ideal average-sized
farmer’s household on Sunnmøre. The farm was set as taxed at one vog fish 286, with a household consisting of husband, wife, a male and a female servant and two minor children 287. In particular Falch emphasized the importance of grain, but also of dairy and meat production for a households’ self sufficiency 288. The grain and livestock production are thus what Falck considered to be the potential production.

Neither was income from fishing or other activities included since these were not yielded from the land, and did not therefore influence the land or the farm taxation he was debating. Thus the profits from such activities were additional 289. Since many of the farmers in Sunnmøre (as well as cotters and day laborers) were engaged in fishing as a pluriactivity, and to lesser extent also in other activities, Falch’s budget provides insufficient information about the total combined income of these households to be of much use. Other contemporary authors can nevertheless be of use.

The contemporary Hans Strøm, writing a topographical description of Sunnmøre published in 1762 can help us understand the social and economic importance of fishing. Strøm noted that:

Fishing has caused the greatest changes in our agriculture, and caused those farms which previously had only one farmer (oppsiter) to now be shared by 3 or 4. Since the fisheries have expanded greatly in recent years, it has not been possible to engage in

286 Taxation of farms was based on their yield of grain, the number of animals it could support and sometimes also forest and grazing land. The farms had been evaluated and set tax on during the period 1665-70, and were not adjusted until 1818. Any improvements or changes in the farm thus did not influence the taxation level of the farm. Land taxation is thus not a useful source to capture economic change. Falch’s ideal farm was 1 vog fish, but how much that yielded is impossible to say. The use of one vog fish is typical of coastal areas where they in the 17th century would have paid taxes in fish. Towards the end of the 18th century taxes were increasingly paid in money. In 1787 Falch re-evaluated his budget, stating that an ideal farm had to be at least 2 vog to be able to support a household of this size. Døssland, A.: “Sunnmorsk jordbrukssøkonomi på 1700-tallet”, Heimen, 1/1983.; Falch, M: ”Undersøgelse om hvor stor gaard en bonde bor bruge paa Syndmør; og ikke større” quoted in Døssland, A.: “Melchior Falch og den Sunnmørske jordbrukssøkonomien på 1700-tallet”, Tidsskrift for Sunnmøre historielag, årg. 58, Norsk Foto og Trykk, 1982, p. 83.

287 Atle Døssland’s studies of households in the region show that Falch’s numerical estimate is slightly high. Døssland’s calculations based on parish records from the area indicate 5,07 for Ulsteinvik parish and 5,56 in Hjørundfjorden in 1762. Furthermore, the gendered makeup of Falchs household was also inaccurate. Labour migration caused by the fisheries meant that Sunnmøre had a surplus of women, thus there would have been more female than male servants. Døssland, A.: 1983, p. 28.

288 Using the idealized budget, Falch also wanted to show that Sunnmøre would be self-sufficient with grain, if not for the number of persons employed outside of agriculture. These persons were mainly cotters or seasonal workers engaged in fishing, and so were dependant on the market to purchase other necessities.

agricultural developments. With the aid of annual profits from fishing it has been possible to survive on smaller plots. In addition there is the problem of servants which forces the farmer to give part of his land to his son, as early as possible, so that he can be relieved in the otherwise enormous agricultural work. In this way ... the population grows, especially the share of those engaged in farming.  

Incomes from fishing and the timber trade thus supported the population growth and enabled households to continue with one foot in agricultural production by managing to live as farmers on smaller plots of land. Since fishing and timber provided households with income to purchase necessities and other goods from the market, there was little need for people to seek other work, thus decreasing the availability of servants and labour in fishing regions. The situation changed towards the end of the 18th century because of declining yields in the coastal fisheries, and only communities and households which managed to increase yields through technological change were able to keep up.

The contribution of men and women’s work

The shares which pluriactivities made up in the budgets indicate the role and contribution of women’s and men’s work for the household in the pre-industrial period. In Trysil both genders’ contribution is clearly visible. Livestock and dairy production was traditionally women’s work, and income from its sales to the inter-regional market made up 18 percent of the households’ income, showing this made up a significant part of households’ income. In addition to what was sold, women also produced dairy and meat for the households own consumption, but Axel Smith did not estimate how much this was. Similarly the significant share which livestock and dairy formed in Falchs budget for Sunnmøre reveal its potential contribution. That Hans Strøm emphasized the importance of livestock as suppliers of milk

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290 “I øvrig have Fiskeriene gjort den største Forandring i Jordbruget hos os, og foraarsagetat de Gaarde, som tilform havde kun een Opsider, ere nu deelt imellem 3 eller 4; thi da Soebruget i de senere Tider meget stærkt har tiltaget, har man ei kundet befatte sig med vidlofitt Jordebrug eller Land-Brug, men ved hielp og aarlig Fordeel af Fiskerienerne kunde ernære sig af smaa Jord-Parter; hvortil kommer den mangel paa Tieneste. Folk, som nøder en Bonde til, jo før jo heller at dele Jorden med sin Son, for at faae en Lettelse i sit ellers uovervindelige Jord-Arbeid. Paa saadan Maade er og bliver enhver Jord-Part desto mer Forbedret, og saa vel Folkets Antall i Almidelighet, som de for Jordbrugendes i særdeleshed, stærkt foroget: ” Strøm, H.: Sunnmøre, 1762-9, p. 505
for poorer households confirms that dairy was a common produce, as well highlighting its vital role for survival in some households. Other topographic authors confirm the importance of dairy and meat production for the household, such as Peder Holm writing from Lister and Mandal (southern Norway) that for farmers in the inland regions such produce is the only thing that enables them money to pay taxes and expenses. Christian Sommerfelt writing from Christians amt (today Oppland in inland eastern Norway) noted that dairy and livestock was the main productive activity for communities in the mountainous regions.

Work in the export sectors like timber, fishing, mining or sailing was primarily men’s work and these seem to have contributed significantly to households income. It was often seasonal and required short term labour migration, but much of it was compatible with calm periods in the agrarian sector, such as the felling of trees or the Lofot fisheries in winter. This was an efficient way to employ otherwise surplus labour resources in productive activities. The importance is exemplified by Axel Smith’s estimate that timber contributed more than 80 percent of a household’s income, and was the main reason the community had been able to support its population growth. Even if there is no data available from the coastal regions it is clear from both Falch’s and Strøm’s comments discussed earlier that incomes from fishing were essential both to finance the household, and to support the growing population. Studies of households connected to the mines and metals works show that men’s paid work constituted the main income. From this it would seem that it was male work which was the most essential for households’ income in the last decades of the 18th century.

But focusing on the market oriented production of livestock and the export trades disregards the importance of the production for self sufficiency. It was this production which provided the household with security in the form of supplies of necessities in a situation where the still developing internal market could not be relied upon to provide what was needed. This work was partly dairy and meat production (as discussed above), but also the production of grain, as

293 "for de der boe i Oplande det eeneste hvorved de tilvende sig Penge til Skatter og Udgifter”. Holm, P.: Lister og Mandal, TJ, hefte 8, 1794.
well as textiles or other produce. As men engaged in the export trades could be away for part of the year, in some cases colliding with the agricultural cycle, much of this work would fall to the women.

It should also be noted that women played important supporting roles in many of the traditionally male sectors. In some cases the production and processing depended on their labor. This was especially true in the fishing sector as women and children would do much of the processing, such as cleaning, salting and drying of the fish, before it was exported. Women also took part in aspects of the timber trade, such as in tar production where they would help keep watch over the tar pits. In households connected to mines and metal works women were also employed in the menial tidying and carrying tasks, or the driving of coal and fire wood.

Less information is provided about either gender’s contribution in grain producing households, like the budget from Spydeberg. Other studies have shown that both women and men were engaged in agriculture, and depending on the wealth of the household, also in other productive activities. The Spydeberg budget indicated some dairy production, as well as forestry, but also sale of herbs and hay to the town altogether constituting more than 15 percent. Other studies have shown that poorer households in such areas engaged in household manufacturing such as those discussed in chapter 2.3.3b, of which textile production in particular was a women’s trade. 296

When coupling the observations of the contribution of the men’s and women’s labour to household incomes with the theory of an industrious revolution, two perspectives are clear. Firstly there appears to have been little surplus labor to employ as women were already engaged in both market productive activities, as well as production for self sufficiency. Some surplus supply of labor may of course have been present in the form of working longer days or reducing leisure time, however the most significant increase in labour resources came only

as the internal market could be trusted to provide the necessities. Only in this way could women’s labor be released from production for self sufficiency. This was a gradual process, and was not complete until well into the 19th, and in some places even 20th century, at which point the ideal was that women would not partake in production whatsoever.

However, one should question how old a process this was. Both Strøm and Smith indicate that participation in the export trades had dramatically increased within the time that they themselves (and their congregations) could recall. This coincides with the spread of the market and the expansion of the export trades occurring in the 18th and early 19th century at various speeds throughout Norway. The engagement in the export trades should thus be understood as significant for many, or at least that the increased engagement in such trades was new. As such there are clear indications that households increased their total economic activity, or put another way; they became more “industrious”. This increase took form as households allocated male labour resources to the export trades and female labour to livestock and dairy production, but also more of households’ production for self sufficiency. This way of organizing labour resources allowed a more efficient allocation of labour between agrarian activities and other pluriactivities, as well as a seasonally diverse production. It also helps explain how market participation was so widespread amongst rural Norwegian households. The timing of this process appears to have varied with communities’ market integration; however the last half of the 18th century and first half of the 19th century stand out as the period when more households decided to gradually shift towards increased market oriented production.

But taking into account the varied geography and the independence of actors such as households it must be concluded that both trends occurred parallel to each other depending on regions and households market integration. Both also influenced each other; as the internal market became more broad and predictable, households could shift more of the female labour resources to market oriented production. As such it can be claimed that households did increase their market oriented production, and that this significantly contributed to households’ incomes. However it is still unclear why they did so, and thus if the changes taking place fit in with the industrious revolution theory. To understand this better it is
necessary to look at the expense details within the budgets, the material wealth of households and, as will be examined in later chapters, to analyse the spread of consumer goods.

### 4.1.2 Expenditures

Smith’s, Wilse’s and Falch’s budgets provide useful information about the expenditure side of households’ finances. The largest shares were taken up by grain; 73 percent in Trysil and Spydeberg (57 percent for consumption, the rest for sowing) and 43 percent in Sunnmøre (tables 4.1, 4.3 and 4.4). Both Smith’s and Falch’s budgets estimated about 21 barrels of grain (depending on the sort of grain) for the households annual consumption. Wilse calculated 97 rdl in expenses to pay for the grain consumed by the household.

In Trysil the natural endowments and climatic conditions made it necessary for households to often purchase much, and sometimes all, of the grain it needed. The high grain expenditures in Trysil were, according to Smith, due to transportation costs. His argument is plausible because of Trysil’s mountainous locality and isolation in spring and autumn due to melting rain and snow which made travel difficult, if not impossible. Also, transport was specifically included in the category for other general commodities in his budget. It should also be noted that not all of the grain was consumed by the household itself. Smith wrote that several of the grain barrels were used to pay day laborers working during the harvest, reflecting that moneyled transactions had not spread fully to the inland mountainous areas. In clear contrast the Spydeberg budget produced enough grain to meet its own consumption, and even have some surplus. Less is revealed about the Sunnmøre farms’ production, other than that Falch was of the opinion that theoretically they could be self sufficient, but had chosen not to be so to at least some degree. From Hans Strøm it is reported that several communities in Sunnmøre specialized in fishing, and so depended on the market for grain and other supplies.

Smith noted that inland fishing was an important source of food in Trysil, but that it was also supplemented by salted herring, which together with salt made up 3 percent of the

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297 Smith, A.: Trysil, TJ, hefte 23, 1798, p. 137
households’ expenses (table 4.1). Both these goods had to be purchased from the market. In the parish budget (table 4.2) Smith set the share of expenses for salt and herring, together with iron, iron goods, lead for bullets and gunpowder to 4 percent of the community’s expenses. In Spydeberg the household bought salted herring from town, but other goods to cover iron goods and textiles had to be purchased with the 11 rdl surplus. In Sunnmøre iron tools, general repairs to housing and bedding made up 4 percent of the households’ annual expenses. Bedding and possibly also household repairs were in the Trysil household budget, most likely indicated by the terms “general commodities” and “artisans”, or were made by the household itself, and therefore not included.

Falch did not include expenses for fish in his 1764 budget as this was something households attained for themselves. In a revision, dated 1787, dried fish was noted as an expense of 10rpdl 5 mark for households in inner parts of Sunnmøre, a mountainous area distant from the coast. This was far more than the 3 rdl which households in Trysil spent on herring and salt combined. It is possible that the Trysil households fished more than households on the mountain sides of the fjords of Sunnmøre, as the former were known to sell frozen fish in the winter at the market in Elverum, and possibly also Christiania. Households in coastal areas would only need to purchase salt in order to conserve their fish.

A study of expenditures of full-time wage workers at the Baasland/ Næs iron works in Agder paints a similar picture. In 1726 households spent about 78 percent of their annual income on necessary food items like grain (incl. milling), salt and meat; in 1736 70 percent, both excluding transport. In 1766 the figure was 76 percent including transport and in 1801 78 percent. A micro history study of a wage earning miner’s expenditures in 1726 at the Røros copper works similarly shows that about 65 to 75 percent of his wage was spent on foodstuffs.

299 Smith, A.: Trysil, TJ hefte 23, 1798, p. 19
301 They ice fished, and after having let the fish freeze in the winter cold, they stored it in heaps of snow before taking it to market. Trysil is still a very cold place in winter, however in the 18th century the little ice age made temperatures even lower, making this frozen fish trade possible. Ref: Smith, A.: Trysil, TJ, hefte 23, 1798.
Declining real wages at the Røros copper works at the end of the 18th century implies that the share increased. 303

Clothing was mentioned in the Falchs budget, and made up an annual expense of 14 percent of the households’ income if the wool and linen was not produced and woven domestically. Dairy products and meat constituted an expense of 21 percent for households in Sunnmøre who did not produce these themselves. In the Trysil budget, clothing, dairy and meat products were not mentioned as Smith assumed they were produced by the household itself, and thus not an expense as such. The budgets for Trysil mentioned tobacco specifically as a significant expense. In Falch’s budget tobacco was not included, but his contemporary Hans Strøm commented that at about the same time, and in that region, it was widely consumed. 304 Wilse noted tobacco and clothing amongst the goods which the 11 rdl surplus was spent on. Tobacco will be discussed in much more in depth in chapter 6.

With the exception of tobacco neither Smith nor Falch included much, if any consumer goods. Smith specified that he had left out kramvarer (shop goods), stating that if these had been included, the budget would have come out negative, indicating that households in Trysil in reality were bankrupt. Falch noted some repairs, wear and iron for a plow of about 4 percent, but left out items like Sunday dress, expenses for weddings, funerals, medicines for humans and animals, and, any extra-ordinary taxes had been excluded. These he assumed to amount to at least 10 rdl per household, which, if included in the budget, would have made up about 10 percent. 305 In the Spydeberg budget this was also covered by the surplus estimated to 6 percent of the income.

In both Falch’s and Smith’s household budgets, taxes and expenses like tithes made up 4-6 percent of the expenses and the servant wages 11 percent, while in Spydeberg this amounted to respectively 14 percent and 11 percent. The difference in taxes may lie in the size of the land controlled by the farms, while the wage is explained by regional differences in which

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Eastern Norway was known to have high wages. The low taxes especially in Herøy and Trysil, contrasts sharply to Kåre Lundens arguments in which heavy tax burdens drove households to engage in the market. Instead these budgets indicate that households had other reasons for doing so, such as genuine need in harsh years, but also material aspirations during good ones.

All in all the budgets show that on the expenditure side there was little left to finance any frivolous consumption. There was only a little spare to be used on other things, and if larger investments were included the annual budget was negative. Since these were idealized annual budgets they only indicate the economic flow of the household’s resources. They do not reflect households’ material wealth, nor do they show one off investments of wealth in material goods such as house or land purchases, investments in boats and expensive equipment or durable and semi durable goods like furnishings, tableware and bedding.

4.2 Material wealth seen through probate inventories

Probate inventories are an often used source of early modern households’ material wealth. By looking closer at the distribution of wealth in communities, and, the share of wealth which different categories of possessions took up, it is possible to get an impression of wether there was surpluss wealth and what material goods households deemed to be important. In the next chapter probate inventories are used to identify trends in the spread of durable and semi-durable goods.

Remembering the representativity and reliability issues of probate inventories discussed in chapter 1.6 in mind, the following section will examinethe material wealth of a selection of households in the three rural communities between 1770(77) and 1819 engaged in the developing market economy in different ways. These were Austrheim (1777 to 1819), which primarily supplied an urban market, Herøy (1770 to 1819), which was involved in fish

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exports, and Stor-Elvdal (1770-1819) which supplied timber for the timber trade (see map 4.1 for geographical locations).307

Most studies have focused on the material wealth of the upper reaches of society, and far less is known about the poorer and middling groups.308 To capture differences in the material wealth and conditions of different groups in rural Norway the probate inventories have been divided into wealth groups for parts of the following discussion. Setting these groups proved challenging as no clear criteria were apparent. Pre-industrial Norwegian society rarely distinguished professions, so this could not be used as an indicator. Also the distribution of wealth was in some cases so unequal that basing the groups on the share of wealth they controlled was similarly not a viable solution. Instead a division into 1800 price adjusted gross wealth groups proved the most practical approach, and the groups have been set as less than 100 rdl, between 101 and 200 rdl and more than 201 rdl. These same groupings are also used in chapter 5 in the discussions on the spread of a selection of consumer goods.

4.2.1 Wealth disparities as seen using probate inventories

Austrheim lay in Hordaland, and was part of a region called Strilelandet.309 Households in this region primarily engaged in trade with Bergen, supplying foodstuffs like meat and dairy, as well as fresh fish. Austrheim lay in the northerly, more distant corner of Strilelandet, and this distance caused it to lose in competition with communities closer to Bergen which could supply fresher produce. Austrheim was thus amongst the poorer Strile communities. In the late 18th century the town trade was partly conducted by a representative of a Bergen merchant at the farm Fedje, but for the most part it was done by the farmers themselves.

307 The inventories for Herøy and Austrheim have been made available, in electronic form, in full by, respectively, Inge Remøy and Arvid Skogseth. The gross wealth of the Stor-Elvdal inventories has been compiled by Ragnhild Hutchison based on catalogue cards of inventories. The exemplary inventories have either been chosen from the Herøy and Austrheim inventories, or in the case of Stor-Elvdal from the scanned and electronically available probate records for Østerdalen sorenskriveri in Hedemarken at www.digitalarkivet.no. There one will also find the original inventories for Herøy and Austrheim.
Most of the farmers in Austrheim were tenants on small plots providing relatively low yields of both grain and animal products. Fishing was important, but since the climate was unsuitable for stockfish production, it was mainly for the households own or domestic consumption. The inventories show that the Austrheim households did not shift to net fishing, or to larger boats. Instead they continued with line fishing for herring, despite the low yields experienced in the decades either side of the 19th century. Sales of dairy, livestock and fowl to Bergen were also an important source income for many households. Population growth was slow largely due to migration to Bergen; from 590 in 1701 to 786 in 1769 and to 870 in 1801.310

Herøy was part of the coastal region of Sunnmøre (described in part 4.1), and was much further from urban centres like Bergen or Trondheim than Austrheim. Despite the distance, Herøy was a wealthier community than Austrheim. This was partly because the land in Sunnmøre in general gave higher grain and animal yields. But Herøy was also one of the region’s specialized fishing communities. This made it more susceptible to the booms in the fish exports, but also, the busts.311 During the fish bonanza of the mid 18th century the Herøy fisher-farmers had concentrated on costal fishing of herring.312 But, as the fish disappeared towards the end of the century new technologies allowing for larger catches and deep sea fishing of cod spread; herring lines were still noted in the inventories, but increasingly so were nets and large boats, suitable for cod fishing further off shore. Like other communities in Sunnmøre, clip fish production spread to Herøy in the last half of the 18th century, enabling local fishermen/farmers and traders to take part in the international market.313 The population rose from 1450 in 1701 to 2296 in 1801. This limited growth can be explained by high mortality, and migration out of the community, but a steep decline was avoided by some work migration to the fisheries. It should be noted that the Herøy selection of probate inventories has a slight bias towards traders’ inventories. However, as there was a concentration of traders

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in the community and because inventories of other groups have been added over time, it can be assumed that the selection is relatively representative of the probate inventories available, and in extension of those in “productive age” in Herøy.

Stor-Elvdal lay in Østerdalen, in the mountainous interior of eastern Norway. Like its neighbouring community Trysil, the climatic conditions permitted little grain production, and households thus largely depended on the market to provide this. Stor-Elvdal was rich in timber, and had since the early 17th century been involved in the timber trade. As the majority of the land had been owned by local farmers since the 1690s, profits from the timber trade went to local households. The distinction between those who owned land, and those who did not increased throughout the 18th century as the timber trade grew in importance. Dairy and meat production for sale in Christiania and other markets in Eastern Norway were also an important source of income for many households, and some households engaged in market oriented textile production. The population grew from 360 persons in 1665, to 800 in 1762 and 1297 in 1801. In the last part of the 18th century young people began leaving the community as the competition for land became too high.314

Using probate inventories to say something about inequality and equality of wealth in communities is problematic.315 The probate inventories do not provide information about what was given away prior to death, nor all the resources a household had access to, and they can also not be trusted to be fully representative of the population. However, as more ideal data like tax lists or income overviews are unavailable, and as noted in chapter 1.6 the Norwegian inventories tend to be relatively representative both with regards to the age and, in part also, the wealth of the population, the probate inventories of the three communities can be used to at least indicate trends in the distribution of wealth.

Figure 4.1: Spread of inventories according to gross wealth in Austrheim, Herøy and Stor-Elvdal. Scale log. Adjusted to 1800 prices using CPI for Norway.

![Figure 4.1](image)

Table 4.5: Number and share of inventories in wealth groups below 100 rdl, between 100 rdl and 200 rdl and more than 200 rdl sorted according to gross wealth, adjusted to 1800 using CPI for Norwegian prices.

<table>
<thead>
<tr>
<th></th>
<th>Less than 100 rdl</th>
<th>Between 101 and 200 rdl</th>
<th>More than 201 rdl</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Share</td>
<td>Number</td>
</tr>
<tr>
<td>Austrheim</td>
<td>107</td>
<td>65</td>
<td>41</td>
</tr>
<tr>
<td>Herøy</td>
<td>126</td>
<td>47</td>
<td>74</td>
</tr>
<tr>
<td>Stor-Elvdal</td>
<td>47</td>
<td>27</td>
<td>20</td>
</tr>
</tbody>
</table>

Figure 4.1 shows the gross wealth (adjusted to 1800 prices) of the inventories in Austrheim, Herøy and Stor-Elvdal. Compared to the two other communities, figure 4.1 shows that the overall majority of the Austrheim inventories tended to be poorer than those in both Stor-Elvdal and Herøy. This is confirmed in table 4.5 which shows that once adjusted to 1800 prices only 10 percent (16) of the gross wealth of the inventories exceeded 201 rdl, 25 percent (41) between 101 and 200, and 65 percent (107) less than 100 rdl. The gross wealth of most of the Herøy inventories was in general also poorer than those in Stor-Elvdal. Once adjusted to...
1800 prices 47 percent (126) had less than 100 rdl, 28 percent (74) had between 101 and 200 rdl and 25 percent (68) had more than 201 rdl. Comparatively 27 percent (47) of the inventories from Stor-Elvdal were valued at less than 100 rdl, 11 percent (20) at between 101 and 200, and 61 percent (107) to more than 201 rdl.

The significant difference in wealth between Stor-Elvdal , and both Austrheim and Herøy is in part explained by the larger share of land owners in Stor-Elvdal, as well as that Stor-Elvdal benefitted from the boom in the timber trade which occurred in the last part of the 18th century, while the coastal communities involved in fisheries experienced the decline in this sector. Regional differences in prices between eastern and western Norway likely also played a role. 316

Figure 4.2: Lorenz Curve, Austrheim, Herøy and Stor-Elvdal 1770 (77) -1819.

It should also be noted that figure 4.1 shows that none of the Stor-Elvdal inventories had as much gross wealth as the wealthiest of both Herøy and Austrheim, indicating that wealth was far more unevenly distributed in the latter two places. The inequality of the gross wealth distribution is more clearly seen in figure 4.2 which shows how large a share of the aggregate gross wealth of each community was owned by a share of the population. Since the poorest were likely been more unrepresented, the differences were likely to be somewhat greater than the estimates here indicate. In Austrheims case the richest 10 percent owned about 75 percent of the aggregate gross wealth, in Herøy they owned about 80 percent, while in Stor-Elvdal they owned about 25 percent. This difference in the spread of wealth is confirmed by Gini coefficients\(^{317}\) calculated on the basis of the gross wealth of the probate inventories for the three communities. For Austrheim it was \(0.85\), for Herøy \(0.94\) and for Stor-Elvdal it was \(0.64\).

The difference in inequality between Austrheim and Herøy, compared to Stor-Elvdal is best explained by their engagement in different export trades. The timber trade which Stor-Elvdal engaged in was experiencing a boom in the last decades of the 18\(^{th}\) century, while the fishing sectors were struggling. Also, investments in infrastructure for processing the fish required concentration of capital, but also provided profits for those who dared to invest, thus helping to increase wealth disparities. In both sectors the Napoleonic war implied great difficulties which would have affected all three communities. The sample does not cover the post-war years when the timber trade was struggling and the fish exports improved. It is plausible that those conditions would have been similarly reflected as greater differentiation in Stor-Elvdal, and more equality in wealth, especially in Herøy.\(^{318}\)

Generalisations made on the basis of the calculations of these three communities are problematic. However, what they all show is that wealth in rural Norwegian pre-industrial communities was significantly unequally distributed. This is further supported by the results from Lee Soltow study of the distribution of real estate discussed in chapter 2.2.1 which

\(^{317}\) The Gini coefficient is a measurement of statistical dispersion often used for inequality of income or wealth. \(0=\) full equality, \(1=\) full inequality.

\(^{318}\) Using the microfilmed (and soon scanned and electronically available) catalogue cards containing the name of the deceased, names (and often ages) of heirs, and gross and net wealth of all inventories undertaken in Norway for probate inventories made in the 18\(^{th}\) and early 19\(^{th}\) centuries, a more thorough study of wealth distribution, and possibly also GDP, could be made. This, however, has been outside the scope of my thesis.
indicated that 10 percent of the farms with the highest value made up 42 percent of the aggregate value, which constituted a Gini coefficient of inequality of 0.57. That the inequality was less amongst landowners, compared to the three communities which cover a wider share of the population, is plausible, and helps strengthen the impression that wealth distribution was unequal. Compared to international estimates of wealth disparities in pre-industrial societies the three Norwegian communities come out high. Carol Shammas estimates were based on the mean wealth noted for the professions and extrapolated for the known size for Worcestershire in 1669-70. This gave a Gini coefficient of 0.532. Alice Jones based her estimates on probate inventories for the Middle colonies and found a Gini coefficient of 0.50 for all probate types and 0.57 if it was estimated only for only all the living free adult potential wealth holders. It should be taken into account that both the English and the American inventories tend to be biased towards the wealthier share of the population, and thus the real difference may not be as large.

4.2.2 Material wealth tied up in goods

Even if probate inventories only show the stock of items at the time of death they can still reveal trends in how households’ material wealth could be tied up. Studies of this can provide an impression of how households were able to acquire a livelihood, as well what material wealth they prioritized. If the analysis is made across groups it may also indicate trends in what was prioritized when there was surplus wealth.

This part looks closer at one probate inventory from each of the three wealth groups discussed above in the communities Austrheim, Herøy and Stor-Elvdal. The inventories were selected to exemplify the material wealth of the households in each group, and they were chosen for their degree of detail. All the inventories involved people who had been married and had children, the majority belong in the economically active age group (“brukeralderen”), and none of them owned the land they lived on. The Austrheim and Herøy inventories were all of households termed “farmer” in the inventories. In Stor-Elvdal the two wealthiest were noted as cotters. This reflects the difference in spread of the cotter system between eastern and western

Norway, but also shows, as discussed in chapter 2, that the cotter institution covered a wide range of different households. The poorest exemplary inventory from Stor-Elvdal was not of a cotter, yet the subject still resided in a cottage at the farm Evenstad (“tilhørende i egen stue på gården Evenstad”) and was owed a significant share of his wealth as wage from the farmer. As no cotter contract was indicated, he has here been considered as a servant (kar/ dreng) with access to a house. The share which different forms of goods tied up the material wealth of the nine exemplary inventories is summed up in table 4.6.

The categories of goods used in table 4.6 should be treated as indicative as items in many cases had multiple purposes. This is especially the case for what has been called “kitchen and dairy utensils” since bowls and similar goods could be used for both purposes and it has proven impossible to distinguish them. The situation is similar for tools connected with timber and miscellaneous woodwork as the descriptions in the inventories do not always make it clear if a saw was designed for cutting a tree or for fine carpentry. Where possible these have been kept separate.

4.2.2 a Productive goods

The spread of wealth on tools belonging to several productive activities reveals that pluriactivity was an essential way for these households to organize their production. Table 4.6 shows that in most of the inventories tools linked to productive activities in agriculture, fishing, livestock, the timber sector and other sectors formed a significant share of all the exemplary households’ material wealth. In both Austrheim and Herøy the poorest inventories had more than 70 percent of their gross wealth tied up in such items, whilst for those in the two richer wealth groups it was at least 30 percent. If kitchen utensils and dairy equipment are included, it was at least 38 percent, but 91 percent for the poorest. That the wealthier inventories had a smaller share tied in productive goods is not surprising as these had more to invest. Table 4.7 confirms that the wealthier households also tended to have (numerically) more 1800 price adjusted skillings tied up in productive goods. In Austrheim the wealthiest inventory had more than 16 times as many skillings allocated for productive tools (including kitchen and dairy equipment) than the poorest. The difference was less in Herøy where the
wealthiest only had about 3 times as much skillings tied up in such tools, while in Stor-Elvdal it was only about 9.

The poorest inventory in Stor-Elvdal was that of a servant, who with his family resided on the farm he worked. He therefore had less need to own as many productive tools as these would have been provided by or borrowed from his employer. The two other Stor-Elvdal inventories had 36 percent of their wealth tied up in such goods, 53 percent if kitchen and dairy equipment is included. Looking at the amount of 1800 price adjusted skillings that were shown to be tied up in these groups (see table 4.7), the difference in wealth is clear: 11 958 skillling in the middle wealth groups, while 18 455 skillling in the richest were tied up in productive tools, including kitchen and dairy equipment. The difference totalled about 68 riksdaler.

A small study of probate inventories in the community of Asker, close to Christiania, between 1650 and 1800 can indicate how households’ resources were tied up in the grain producing sector where work for the local iron works was also important. The study is small and does not include land or animals, and can thus only be indicative. Nevertheless it shows that productive equipment in the form of agricultural tools and wagons for transport, tied up about 20 percent to 25 percent of the inventories studied. This is far less than productive items in the Herøy, Austrheim and Stor-Elvdal inventories, indicating that agricultural production and carting required less material resources than fishing and livestock dairy production.

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Table 4.6: Share of gross wealth tied up in material goods in inventories from each wealth group. Austrheim, Herøy and Stor-Elvdal.

<table>
<thead>
<tr>
<th></th>
<th>Austrheim</th>
<th>Herøy</th>
<th>Herøy</th>
<th>Peder Jetmundsen</th>
<th>Nils Olsen</th>
<th>Stor-Elvdal*</th>
<th>Gunhild Halstens dt</th>
<th>Tarald Jonsen 6.5. 1780</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botele Arnes dt, 6.11. 1793</td>
<td>22</td>
<td>127</td>
<td>328</td>
<td>46</td>
<td>133</td>
<td>282</td>
<td>81</td>
<td>173</td>
</tr>
<tr>
<td>Brithe Erichs dt 29.5. 1800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engel Nilsdt, 10.10. 1810</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Søren Hansen 4.7. 1783</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nils Olsen 17.3. 1808</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nils Pedersen 20.9. 1773</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gunhild Halstens dt 5.10. 1772</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tarald Jonsen 6.5. 1780</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross wealth rdl (adjusted to 1800 prices)</td>
<td>22</td>
<td>127</td>
<td>328</td>
<td>46</td>
<td>133</td>
<td>282</td>
<td>81</td>
<td>173</td>
</tr>
<tr>
<td>Aproximate age**</td>
<td>50</td>
<td>36</td>
<td>44</td>
<td>46</td>
<td>32</td>
<td>39</td>
<td>40</td>
<td>38</td>
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<td>Profession</td>
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<td>Farmer</td>
<td>Farmer</td>
<td>Farmer</td>
<td>Farmer</td>
<td>Servant</td>
<td>Cotter</td>
<td>Cotter</td>
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<tr>
<td>Share</td>
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<tr>
<td>Agricultural tools</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Fishing tools</td>
<td>28</td>
<td>11</td>
<td>7</td>
<td>41</td>
<td>22</td>
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<td>3</td>
<td>1</td>
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<tr>
<td>Livestock</td>
<td>38,5</td>
<td>16</td>
<td>43</td>
<td>35</td>
<td>19</td>
<td>27</td>
<td>17</td>
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<td>1</td>
<td>4</td>
<td>0,1</td>
<td>11</td>
<td>10</td>
<td>4</td>
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<td>19</td>
<td>9</td>
<td>14</td>
<td>14,5</td>
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<td>17</td>
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<td>16</td>
<td>6</td>
<td>4</td>
<td></td>
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<tr>
<td>Durable and semi durable goods</td>
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<td>6</td>
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<td>3,5</td>
<td>19</td>
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<td>0,5</td>
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<tr>
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</tr>
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<td></td>
<td></td>
<td></td>
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<td>9</td>
</tr>
</tbody>
</table>

*ca 10 percent of items taking up material wealth appears to have been left out of the inventories for Stor-Elvdal, but it has not been possible to find out what was omitted, or why. It is possible that this was due to calculation errors, but equally likely that items may have been bequeathed to heirs.

** age is calculated as the age of oldest child added to the average marrying age (25 for women and 30 for men. See chapter 2 for more on this). If no child’s age is noted, or no child is noted, then the age is approximated by using the age of any recorded siblings.
Table 4.7: Wealth in skilling (adjusted to 1800 prices) tied up in material goods in inventories from each wealth group. Austrheim, Herøy and Stor-Elvdal.

<table>
<thead>
<tr>
<th></th>
<th>Austrheim</th>
<th>Herøy</th>
<th>Peder Jetmun</th>
<th>Engel Nilsd</th>
<th>Søren Hansen</th>
<th>Nils Olsen</th>
<th>Nils Pedersen</th>
<th>Gunhild Halstens</th>
<th>Tarald Jonsen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross wealth rdl</td>
<td>37</td>
<td>127</td>
<td>140</td>
<td>268</td>
<td>178</td>
<td>37</td>
<td>111</td>
<td>123</td>
<td></td>
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<tr>
<td>Gross wealth rdl (adjusted to 1800 prices)</td>
<td>22</td>
<td>127</td>
<td>328</td>
<td>133</td>
<td>282</td>
<td>81</td>
<td>173</td>
<td>267</td>
<td></td>
</tr>
<tr>
<td>Gross wealth in skilling (adjusted to 1800 prices)</td>
<td>2112</td>
<td>12192</td>
<td>31488</td>
<td>12768</td>
<td>27072</td>
<td>7776</td>
<td>16608</td>
<td>25632</td>
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<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
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<tr>
<td>Agricultural tools</td>
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<td>244</td>
<td>945</td>
<td>88</td>
<td>638</td>
<td>1354</td>
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<td>256</td>
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<tr>
<td>Fishing tools</td>
<td>591</td>
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<td>2 204</td>
<td>1 811</td>
<td>2 809</td>
<td>3 249</td>
<td>498</td>
<td>256</td>
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<td>Livestock</td>
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<td>13 540</td>
<td>1 546</td>
<td>2 426</td>
<td>7 309</td>
<td>2 823</td>
<td>7 690</td>
<td></td>
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<td>Timber tools</td>
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<td></td>
<td></td>
<td>664</td>
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<td>Other tools</td>
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<td>27</td>
<td>855</td>
<td>1 661</td>
<td>1 025</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Kitchen and dairy equipment</td>
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<td>397</td>
<td>1 788</td>
<td>3 925</td>
<td>78</td>
<td>2 823</td>
<td>4 357</td>
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<tr>
<td>Housing</td>
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<td>1 624</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 025</td>
</tr>
<tr>
<td>Durable and semi durable goods</td>
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<td>488</td>
<td>315</td>
<td>265</td>
<td>638</td>
<td>2 166</td>
<td>233</td>
<td>5 148</td>
<td>8 971</td>
</tr>
<tr>
<td>Clothes</td>
<td>137</td>
<td>1 951</td>
<td>3 149</td>
<td>255</td>
<td>948</td>
<td>1 477</td>
<td>332</td>
<td>128</td>
<td></td>
</tr>
<tr>
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<td>4 511</td>
<td>5 353</td>
<td>1 021</td>
<td>135</td>
<td>830</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>309</td>
</tr>
<tr>
<td>Lent money</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>128</td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 436</td>
</tr>
</tbody>
</table>

*ca 10 percent of items taking up material wealth appears to have been left out of the inventories for Stor-Elvdal, but it has not been possible to find out what was omitted, or why. It is possible that this was due to calculation errors, but equally likely that items may have been bequeathed to heirs.

Hutchison, Ragnhild (2010), In the Doorway to Development: An enquiry into market oriented structural changes in Norway ca. 1750-1830 European University Institute
DOI: 10.2870/19493
Agricultural tools took up a relatively small share of the gross wealth of the inventories from Austrheim, Herøy and Stor-Elvdal, spanning between 0 percent in the case of the servant inventory in Stor-Elvdal, to 5 percent in the two wealthiest inventories from Herøy. The small share is partly explained by none of the three communities having natural conditions favouring grain production, but also because tools for grain growing, such as rakes or sickles were of low value, often only a few shillings. It can also not be trusted that all the equipment which the household had access to was noted. If it was not owned, it could be borrowed from a neighbour. Some items appear also to have been left out systematically, as was the case of grain seeds in the Austrheim inventories.

Tools for fishing, which in this case includes boats, nets, barrels used for storing fish, and fish produce and other related items linked to the fishing sector, are found in the inventories of all three communities. It is not surprising that they took up far larger shares of the gross wealth in the coastal communities than in the inland located Stor-Elvdal. In the former two they tied up larger shares of the wealth in the poorer inventories than in the wealthier ones. The most expensive items of equipment were boats and nets, the price of both varied greatly depending on their quality, as well as if they were used for off-coast or deep-sea fishing. Boats had also become more expensive due to deforestation along the coastline. Fishing equipment is noted in two of the Stor-Elvdal inventories reflecting the importance of inland fishing both for the household’s own meals, and possibly, as was discussed in connection to the Trysil budgets earlier, for sale as “frozen fish” to other regions.

The selection of fishing nets noted in the inventories of Austrheim and Herøy indicates that the two communities differed in their ability to adapt to change. In the Austrheim inventories there was a clear dominance of herring nets, whilst in the Herøy inventories both herring and cod nets were noted. In fact, only one tool for cod fishing was noted throughout the whole Austrheim sample, whilst in the Herøy sample there were 1170 such tools. This indicates that the population of Herøy was more willing to shift from herring to cod fishing when the former disappeared in the late 18th century, whilst Austrheim appear to have resisted this change.

322 Some double registrations are included since some inventories first note the items, and then mention them again when listing how they were distributed.
change. This difference in technological take up also helps explain the difference in wealth found between Herøy and Austrheim, since cod fishing provided an alternative income when the herring disappeared. Herøy was nevertheless slow to pick up this technique compared to its wealthier neighbouring isle Hamram.323

Timber was an important sector in Stor-Elvdal, but was sparsely present in the exemplary inventories. The low share is partly explained by none of them owning forested land. That is not to say that they were not involved in the timber trade in some way, such as working as day labourers, as servants, or as part of their obligations as a cotter. In these cases tools could be provided by the farmer. Also, the tools and equipment needed for working in the forest was generally lower priced, rarely more than a riksdaler, and usually only some skillings or an ort (24 skilling), and thus did not take up much of the households material wealth.

Livestock accounted for a significant share of the gross wealth in almost all the exemplary inventories; spanning between 16 percent and 38 percent. If kitchen and dairy utensils used for processing the milk and meat are included they totaled between 25 percent and 58 percent. The inventories only noted the larger animals, such as cattle, sheep, horses, goats and in some cases swine. Smaller animals such as chickens and geese were not registered, but contemporary authors wrote that at least a rooster and a hen, usually four or five hens, were common in households. Some of the Austrheim inventories noted chicken houses, which compared to inventories in other communities is an uncommon registration. That this meant that Austrheims poultry production was so large that separate housing for the chickens was needed, is not certain, however Austrheim was known to sell poultry to Bergen, and so this may be a possible explanation.

It is interesting to note that livestock and dairy production, which was generally women’s work, represented most of the households wealth compared to the value of the productive tools usually connected to male work such as fishing and forrestry. As the budgets discussed earlier showed, this does not mean livestock and dairy was necessarily the most important

income contributing activity, however it does show that the household considered the production important enough to pour much of its wealth into.

Items linked to other productive activities made up between 0 and 10 percent of the gross wealth in the exemplary inventories which noted them. They were present in all three of the probate inventories for Stor-Elvdal, in the two wealthiest in Herøy, and only in the middle wealth group (and only at 1 percent) in Austrheim. That the two communities most engaged in the export markets were also those with households involved in other production indicates that market integration and market participation was connected.

The variety of other productive activities indicated by the material goods in the exemplary probate inventories help reflect the multitude of economic activities which pre-industrial households could be engaged in. 2 barrels of cod liver oil were noted in Nils Olsen’s inventory. Cod liver oil, or “lyse” was used as lamp oil and axle grease and was produced both for the household’s own use, as well as being sold.324 Equipment for producing “lyse” was found in 32 of the Herøy inventories, while none was found in the inventories for Austrheim. Tools for textile production were noted in the inventories of Gunhild Halstensdtr and Tharald Jonsen in Stor-Elvdal, as well as that of Birthe Erichsdtr in Austrheim. In all three looms were mentioned, but it is not possible to discern if they were only used to make clothes for the household or if the textiles were also sold on the market.

Tools used in smithies as well as for carpentry were also noted in the inventory after Tarald and Gunhild in Stor-Elvdal, as well as Peder in Herøy. It is not possible to determine to what extent these were used for market oriented production as opposed to mainly for the households own needs. In Tarald’s inventory shares in a still were also recorded. Distilleries had been made illegal in 1757, but the fact that Tarald’s household still had shares in one 23 years later indicates that it was possibly still in use.325 Also four buckets described as having

“wine pouring” (vinhelle) were noted. Viewed together this indicates that Tarald’s household at had one time, or still did, serve drinks to paying customers.

The inventory of the servant Nils Pedersen in Stor-Elvdal shows that due wages could tie up significant shares of a household’s wealth. Unfortunately neither the time period in which these had been earned, nor for what type of work was noted. Other productive tools tied up 11 percent of his household’s material wealth. These were 1 vog feathers and one hide still being cured in bark. If these were for the household’s own use or for sale, is not revealed by the inventory. As neither feather bedding, (or any sort of bedding) nor hides, were noted in his inventory, it is likely they were produced for the market.

The lack of banks or other credit and loan institutions in pre-industrial Norway opened the opportunity for some households to engage in money lending. At first glance, Nils in Herøy appears to have done so since 15 percent of his households resources were tied up in outstanding loans to five people in his community. The lack of any letters of mortgage in the inventory nevertheless makes this unlikely. The most plausible explanation is instead that this was money he had given to people to make purchases for him when they were in town. This was the case for the largest debt, owed by Christopher Olsen Leene, and reflects the system of farmers’ trade discussed in the previous chapter. Also Nils Pedersen in Stor-Elvdal had lent out money, in this case 2 rdl 48 sk, but nothing more is known of this.

4.2.2b Non-productive goods

The productive goods which tied up much of these households’ wealth was what enabled the households to secure much of their livelihood, both through production for the market and for self sufficiency. The remaining wealth was tied up in housing, durable and semi durable goods, clothes and precious metals. This part focuses on the amount of wealth which such goods could take up, while the next chapter looks closer at their spread in the two communities Herøy and Austrheim.
None of the subjects of the inventories owned the land, or the houses in which they resided. Both Herøy and Austrheim were part of regions where tenancy was common until the 1820’s. Nothing is known of the rent in the Austrheim and Herøy inventories. Owning one’s own land did not mean that shares could not be owned in others. Peder Jetmunsens owned shares in five other houses, as well as a cotter cabin which altogether tied up 14 percent of the gross material wealth. The inventory after Nils in Herøy also noted ownership of a store house, a boat house and a fishing house, and these were likely to have been built on the land he rented. In Stor-Elvdal the farmers owned the land, while cotters and servants would reside on parts of it, in accordance with contracted agreements. In Tarald’s case he owned a barn and a brewhouse, while the rest of the housing was owned by the farmer Ole Pedersen Koppang. Tarald’s annual rent was 1 rdl, but this had not been paid during the last 8 years, indicating a mutual dependence, or at least a supportive understanding from the farmer about the aged cotter household’s situation. In general houses used for production purposes were priced at 4 to 5 rdl in the Herøy and Stor-Elvdal inventories. In wealthier inventories the items were frequently sorted according to the rooms they were located in, and so reveal the structure of the house. This was not the case in inventories used as examples here, and looking at the other inventories in the database, the lack of mention of the individual rooms was a common feature. This indicates that most of the rented main houses were in fact one-roomed.

That the housing was rented impacted on the share of wealth tied up in durable and semi-durable goods. This was because anything nailed to the wall or the floor was considered part of the house, and thus not part of the household’s wealth. As beds, tables, benches, fire places and similar furnishings tended to be permanent fixtures they were not therefore noted amongst the household’s material goods. In inventories after people owning houses, the furnishings were rarely recorded as they were considered part of the house. This explains why durable and semi-durable goods took up less than 10 percent of the material wealth in the Austrheim and Herøy inventories. To exemplify this, in Botele’s inventory no items of furniture were listed except for a chest with a lock valued at 1 mk. In the Herøy inventories furnishings were similarly few, as were they in Stor-Elvdal. Table 4.7 indicates that the sums tied up in such

goods in Austrheim and Herøy were relatively low, the exception being Nils’ inventory which contained a cast iron.

The 30 percent to 35 percent which durable and semi-durable goods took up in the two wealthiest inventories in Stor-Elvdal stand out in stark contrast to the small share which this category took up in the inventories from the two other communities. Looking closer at what sort of durable and semi durable goods they contained it is clear that warm bedding in the form of sheep skins, elk and calf hides and feather mattresses took up respectively 19 percent and 20 percent of the material wealth of Gunhild and Taralds inventories. In the poorest Stor-Elvdal inventory a sheepskin valued at 1 rdl was noted, likely the rest of the bedding was either owned by the farmer he served, or had been left out in consideration for his widow and child. Taking the high value of bedding in the two wealthiest inventories into consideration, it is plausible to assume that warm bedding was amongst the goods which households prioritized investing their wealth in. The number of skillings which the Stor-Elvdal inventory had tied up in such goods (see table 4.7) was nevertheless nearly twice as much as the middle wealth group, even if the number of items in this category was about the same (29 in Taralds and 28 in Gunhilds), indicating that the quality of the goods were better in the former.

Much of the bedding was likely produced by the household. It was valued highly in Stor-Elvdal, probably because warm bedding was an essential in there since temperatures could fall to below -40°C during the winter. Along the coast where the temperature rarely falls below 0°C, warm bedding was less essential. This is reflected in Peder from Herøys inventory in which only one blanket was noted, while in Nils’ only two blankets and a decorative bed tapestry. In Austrheim no bedding was noted at all in Engel’s inventory, and only one soft blanket and a feather pillow in Birthe’s. A contemporary description noted that typical bedding was straw, two blankets and a sheepskin. Based on this the bedding in the Herøy and Austrheim inventories, as well as in the poorest one in Stor-Elvdal cannot have been sufficient for even one person, let alone a household. This lack of bedding indicates that it had been distributed among the heirs prior to the probate, or that it was deliberately left out as it was considered vital for the household’s survival.

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Connected to bedding and the need for warmth was also cast iron stoves, here included in the category of durable and semi-durable goods. Such are found both in Tarald’s inventory in Stor-Elvdal and in Nils’ in Herøy. Both ovens were valued at 8 rdl, making up 6 percent of the gross wealth in Taralds inventory and 4.5 percent in Nils’. That such ovens are found in the wealthiest inventories indicate that they were favoured objects of investment for those with wealth. Also included in the category of durable and semi-durable goods are books. None were noted in the Austrheim exemplary inventories, but they were found both in the Herøy and Stor-Elvdal inventory. In Nils Olsens inventory there were three books; two psalm books and one titled “søemandens sieleroe” (the sailors peaceful soul) valued altogether at 40 sk. In Tarald’s inventory there were four religious books valued altogether at 22 sk. Together with the durable and semi-durable goods in Tarald’s inventory, a blue sledge (spisslede) with iron fittings valued 8 rdl was also listed. Its design was one which Anna Tranberg has argued was a “status item” used for special occasions like going to church.\textsuperscript{328} That Tarald’s household owned such an item hints at the household having even more wealth previously suggested.

Things like cups or spoons appear to in general have been left out of the inventories. These utensils were used at mealtimes, and their absence is possibly explained by them being considered personal items of the heirs and therefore left out of the inventory of the household’s goods. Or that they were too mundane to merit mention. In Taralds inventory two pairs of wooden cups were noted, valued respectively 8 sk and 12 sk, but nothing is said of their make or appearance.

The share which eating utensils took up is difficult to capture. Bowls and food platters (trau) have here been included in the kitchen and dairy utensil category as they were likely also used for other purposes than dining. Plates have been included in the durable and semi-durable category. The latter were noted in the two wealthiest inventories in Stor-Elvdal; 21 plates, items which were not noted, are mentioned in Gunnhilds inventory, and 9 plates as well as 12 “Swedish plates” valued at 18 sk in Tarald’s. The description “Swedish” shows they had been

\textsuperscript{328} Tranberg, A.: 1993.
purchased from the market, probably from a travelling Swedish peddler. Several of the serving utensils were made of pewter, and since this was a semi-precious metal they have been placed in the category “precious metals”.

Precious metals here defined as gold, silver and pewter formed as much as 37 percent of the material wealth of Birthe’s household. Some of this was, as noted above, pewter, but most was silver jewellery. In Engels inventory precious metals constituted a significant share of the household’s wealth, but unsurprisingly none of the three poorest inventories note any precious metals. These goods also tied up comparatively small shares of the wealthier inventories in Herøy and Stor-Elvdal. This is best explained by market participation, as both Herøy and Stor-Elvdal engaged in the market through the export trades, and so had access to invest in or purchase goods, instead of storing wealth in the form of precious metals.

None of the inventories reveal much about the clothing owned by the household. Clothing in Botele from Austrheims inventory made up 6.5 percent of the gross wealth. Her surviving husband’s clothes were lumped together as “gangklær” and valued 1 rdl 4 mk 8 sk, while what were possibly some of Botele’s clothes were more specified329, but nothing was noted about the cut or quality, and as the list does not contain any skirts it cannot include all of her clothes. The rest had probably been given away or distributed prior to the probate. In the Herøy inventory of Nils, five shirts of fullled wool and hemp were listed. The woollen ones were dyed either blue or grey. Also a pair of grey fullled woollen trousers and a pair of grey stockings were noted, as well as a calamanco valued at 54 sk. All together this amounted to 3.5 percent of the gross wealth. Nothing is mentioned of clothing belonging to other members of the household. Whether this was all Nils’ clothing is uncertain, but the lack of extra socks and trousers draw doubts.

329 These were: a blue fullled woollen shirt valued at 1 mk, two red bodices valued at 18 and 10 sk, a blue fullled woollen bodice at 8 sk and a pair of black leggings (hoser) at 6 sk.
In the inventory after Tarald in Stor-Elvdal clothing only constituted 0.5 percent of the gross wealth\textsuperscript{330}, and Gunhild’s inventory notes only three bluses and a bodice. This cannot have been representative of either their own or the household’s clothing, and so it must be assumed that items of clothing had been distributed to the heirs prior to the inventory. Interestingly, in the poorest of the Stor-Elvdal inventories clothing\textsuperscript{331} made up nearly 20 percent of the material wealth, but taking into account what little else he owned the proportion should come as no surprise. The clothes noted indicate that they were in fact all he owned, however neither his wife nor child’s clothes were mentioned, likely out of consideration for their survival.

Since the clothing is described in so little detail, it is not clear whether they were woven and sown by the household, the cloth purchased and the sown by the household, or if the garments were purchased from the market as a finished product. The sheep noted in the inventories indicate that the woollen clothes could have been homemade, while linen and hemp must have been purchased since it was not grown in either of the three communities. It could, however be spun, woven and sown by the household. The cloth for the calamanco vest must have been bought as this technique required skills still rare in Norway at the end of the 18\textsuperscript{th} century, but it may have been sown by the household.

Cash is rarely found in Norwegian probate inventories; in part this was because the moneyed economy was little developed in the early modern period. But since cash was relatively easy to both hide and divide, it is also possible that it had been divided amongst heirs prior to the inventory. This explains why only one of the exemplary inventories notes any cash. Food stores have not been noted table 4.6 as they appear to have been commonly left out. Items like tobacco or alcohol were also rarely, if ever, mentioned outside of traders’ stocks or in letters of mortgage.

\textsuperscript{330} These were: three pairs of hemp socks valued 36 s, 2 shoes valued 8 sk and two pieces of cloth, one hemp, the other wool, valued at 12 sk
\textsuperscript{331} These were: Three different pants, two vests, a shirt, two pairs of gloves (one of them in wolf skin) and three pairs of socks.
4.3 General trends

None of the sources used in this chapter can be used to draw definitive conclusions about resource allocation or material wealth in pre-industrial rural Norwegian households. They can, however, help indicate trends, as well as commonalities over time, between groups and with other pre-industrial countries.

Looking at the three budgets, it is striking that even if the nominal value of the incomes and expenditures vary greatly, for example the income in Spydeberg is twice that of Sunnmøre, the share of resources allocated to expenditures is relatively similar. Irrespective of whether it was timber, grain or fishing which provided most of the households’ income, it was still grain which households spent between 64 percent and 73 percent of their annual resources on. The share which could be spent on everyday luxuries like tobacco was less than 10 percent, but this could vary greatly, and also had to cover improvements to housing and the replenishment of tools.

Interestingly many of the same trends in annual spending are found in the annual allocation of resources by Norwegian worker’s households in 1906-7. These spent 58 percent of their income on food, 3 percent on alcohol and tobacco, 13 percent on clothing and shoes, 17 percent on housing and furnishings and 9 percent on other miscellaneous items and expenses. Direct comparisons over time are of course problematic. Complicating the comparison, amongst other things, is the fact that the structural and economic conditions of the two time periods are on different sides of the Industrial Revolution. Also, the 20th century households depended primarily on the husbands wage and were located in urban areas, while the 18th century annual budgets describe a rural reality in which self sufficiency still played an important role. It is nevertheless of interest to note that about 120 years after the 18th century budgets were made, there were still many households which spent most of their resources on day to day survival. Today only about 12-15 percent of Norwegian households’ resources are spent on food.

Direct comparisons between the Norwegian budgets and inventories, with studies in other countries using similar sources are even similarly difficult, if not impossible, than across the very different Norwegian regions and over time. Social, economic and natural conditions of countries differed so much that finding households similar enough would be impossible. The lack of details and tendency to lump things together in inventories, not only in Norway, but also in other countries, makes breaking the inventories down into precise and quantifiable pieces of information difficult in most cases. Keeping this in mind, it is still possible to identify possible common trends or general priorities in household expenditures and income in different countries which can help increase our understanding of early modern society.

Comparing the late 18th century Norwegian budgets, which are idealized and based on what the author thought to be representative of an average household, with studies of 17th and early 18th century English household budgets of different wealth groups is problematic. What nevertheless becomes clear is that food was the most important single item in all of them. Lorna Weatherill’s study found that foodstuffs made up a declining share of the households spending as the wealth increased. In the poorest of her budgets, 72 percent of the expenditures went on food purchases or the production of food. In the wealthiest only 30 percent were spent on food, but it was still the item which was allocated the most cash. This same trend is likely to have occurred in Norway too, but further research is needed to confirm this. French studies of 17th and 18th century budgets similarly show that expenditures on food took up between half and two-thirds of the annual resources, with most spent on grains.

Clothing also took up a significant share of a household’s annual resources. In English budgets between 6 and 16 percent was spent on this, compared with 14 percent in Falch’s budget from Sunnmøre. The latter was probably higher since Sunday dress and similar items of clothing had been left out. Similarly servants constituted a significant expense; 11 percent in both Norwegian budgets and between 1 percent and 23 percent, but mainly between 9 to 12

percent in Weatherill’s study. Depending on where the household was located, travel made up significant shares of the household’s annual expenses, in England as well, where travelling was more often undertaken for pleasure than business as was the case in Norway.\textsuperscript{337}

On the income side of the Norwegian budgets it is clear that both women’s and men’s productive activities contributed significantly. Income from men’s work in the export trades was more volatile due to the changing conditions of international trade and demand, while women’s productive activities were less exposed, but also ensured some self sufficiency. In this way income from women’s work was able to mitigate the impact of the sometimes low and deteriorating male earnings. The same has been observed for households in England in the 19th century involved in handloom weaving.\textsuperscript{338}

It is more difficult to compare the results from probate inventory studies. The lack of detail and descriptions in the inventories provide insufficient information, especially about durable and semi-durable goods. The Norwegian inventories clearly indicate that much of households’ material wealth was tied town in tools used for production, in the cases studied here they comprised as much as 38 percent in the wealthier inventories and 91 percent in the poorest. The wealthiest also tended to have more skillings invested than the poorer households. As Stana Nenadic observed in Scotland, items linked to traditional women’s productive activities tied up significant shares of the household’s wealth.\textsuperscript{339}

Less is known about the non-productive items as these appear partly to have been rented, or to have been left out of the inventories. Depending on climate other goods made up only small shares of the material. In the colder regions where warm bedding and heating were essential, this study indicates that bedding and ovens were prioritized investments which tied up a significant share of the wealth in more affluent households. Wealthier households appear to have had significantly more skillings invested in such goods, indicating their better quality.

\textsuperscript{337} Weatherill, L.: 1996, p. 112-36.
That probate inventories in many countries are biased towards the wealthier part of the population, and thus say little about the more average and poorer people, is yet another stumbling block for cross-border comparisons. So is the fact that different countries included or excluded different aspects of the deceased’s property and wealth, for example in England real estate and outstanding debts were not noted. The level of detail of the sources, as well as the value of the economic resources of the people of whom inventories were made after death, therefore differ so much between countries that identifying trends would be meaningless. Keeping this in mind, some comparisons can be attempted.

Looking at the production side of Carol Shammas’ study of pre-industrial consumers in England and the thirteen American colonies, it is striking that the rural Norwegian population in this period had more choice with regard to livelihood than their Anglophone brethren. As enclosure and population growth restricted access to land and animals, there was little choice for the lowly rural English farmer but to move to urban areas and become a wage labourer. The Norwegian rural farmer was to a larger extent able to stay in rural areas by engaging in one of the expanding export sectors or in the processing of these. This pluriactivity enabled the farmer to survive on a smaller plot of land than his forefathers, since the extra income enabled the household to purchase necessities like grain from the market. In agricultural communities like Spydeberg the lack of employment in the export sectors was solved by the expansion of the cotter system. It is nevertheless pertinent to ask if the Norwegian urban areas would have been able to absorb the surplus population had it not been engaged in the rurally based export sectors.

The situation was confusingly different in the thirteen American colonies. Plenty of land enabled more colonists of modest wealth to own both land and livestock. Whilst grain production was surprisingly low both in the north and the south, farm animals were frequent, even if tools for dairy production were rare. Carol Shammas explained the latter through the large availability of beef, pork and milk, as well as access to international markets for grain.

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In comparison Norwegian households’ grain production was low’ partly because, like in America, they chose to produce other things for the market, but also because the geography in many cases made access to international grain markets difficult, and the climate did not enable farms to be self sufficient in grain. In the southern American colonies, profits from tobacco production enabled specialized production in many households. As with the Norwegian timber and fish, the specialization was driven by demand in foreign markets, But contrary to Norway, Shammas’ study indicates that this specialization went even further, enabling households to virtually stop producing grain and dairy products for their own needs, and instead rely on the market for necessities.341

4.4 Conclusions

Understanding what choices and decisions were made concerning resources and wealth by households in the pre-industrial period is difficult as the sources available are often thin, and only reveal hints of what occurred. What nevertheless becomes clear is that households’ income was based on a mix of economic activities, coinciding with the pluriactive way of organizing production discussed in chapter 2. Some of these activities were primarily for self sufficiency, others were related to the market, both domestic and European. Both genders were involved in the productive activities, however men were primarily engaged in the seasonal export sectors, while women were engaged in livestock and dairy as well as the agricultural production and running of the farm when the men were away. This is an example of an efficient reallocation of the resources of land, time and labor at household level which ensured seasonal diversity, helped increase economic activity, as well as explaining why market participation was so widespread in many rural Norwegian communities. This way of organizing the households’ labour resources depended on the household taking part in the market, however the undeveloped internal market restricted the household from increasing its market oriented production, and thus required that it continue to spend part of its labor resources to ensure some self sufficiency. It is also clear that it was in the last half of the 18th and the early 19th century that an increasing number of Norwegian rural households decided to increase their market oriented production.

The expenditures of the household were dominated by basic needs, primarily food. Only little was available through the year to be spent on other goods, and even this depended on luck as well as good yields in the productive activities the household was engaged in. This impression of hardship is confirmed by the probate inventories which show that that most of a household’s wealth was tied up in goods linked to production, only smaller shares were invested in other goods. This was most clear in the poorer inventories, while the wealthier had invested somewhat more in durable and semi durables, of which warmth seemed to be high priority. Consumer aspirations thus existed, however the possibility of realizing them depended on spare resources and wealth.

That is not to say that the wealth and resources spent and invested on durable and semi durable goods, as well as perishables was unimportant. As the next two chapters will show; such goods had significant impact on the social and economic structure of pre-industrial society, and helped create a basis for which the later Industrial Revolution and modern market economy would develop.
Chapter 5: Changing trends in housing, furnishings and smaller household goods

Changing consumer trends have been identified as occurring in the economically leading countries in the early modern period, but also households in rural Norway were affected. This chapter will focus on some of the changes in durable and semi-durable goods in pre-industrial Norway. Emphasis will be placed on how market participation affected the spread of these trends, as well as the social and economic consequences of the new goods.

Central concepts in this and the next chapter are two general trends identified in early modern consumption which has been summed up by Jan de Vries as comfort and breakability of goods. Comfort involves the spread of different sorts of comforts. This could be goods related to the household’s physical surroundings such as improvements in housing and furnishings. It also meant social comforts such as emphasis on the individual, privacy, emotional wellbeing and civil behaviour which made social settings more predictable and calm, facilitating negotiation and compromise as well as constructive and rational discussions. Goods reflecting these trends were items such as individual eating utensils, books, watches, and objects linked to aesthetic comfort such as paintings and other decorations. 342

The second trend, breakability, implies that the lifespan of goods became shorter, but that durable and semi-durable goods also became more available. One way this happened was through mass production, but not in the modern “conveyor belt” sense of the term. Instead it took shape as a gradual shift from the small, but high quality production of a limited number of master craftsmen, to many, but less skilled workers who together produced more goods, in larger quantities and more cost efficiently, but often with lower quality. Lower prices thus made buying goods easier for a wider share of the population, but declining quality implied that the goods broke easier, making more frequent replacements necessary. Lower prices also

enabled more people to keep up with changes in fashions, thus further pushing the wheels of the economy.343

The sources used here are mainly contemporary descriptions, as well as studies of items which have survived. Norway’s first “social scientist” Eilert Sundt differs in this as he tried to improve living standards by first understanding the people and their choices. He was adherent to “modern” scientific ideals using statistics and neutral observations. His books, published around the mid 19th century, were based on trips through the main regions of Norway and emphasized both changes over time, as well as contemporary people’s living conditions.344 Analysis of probate inventories from Austrheim and Herøy are used to follow the spread of goods, however as probate inventories have proven to be incomplete sources for durable and semi-durable goods, they are primarily used as supplements to other sources to indicate trends and distribution in different groups. Secondary literature, especially studies of artefacts in museums, traditions, and of prices have contributed importantly to discussions in this chapter.

The first part of the chapter traces changing trends in housing, furnishings and a selection of smaller household goods and notes how their spread was impacted by the market. Attention is then shifted to discussing how households were able to acquire the new goods, before, in the third part, analysing the economic and social consequences of the new trends and goods. Comparisons are made, but varying natural conditions and different focuses often make this complicated. The solution has therefore been to place the goods discussed in a wider context, and when possible identify similarities.

5.1 Comfort

Improved comfort can take form in many different ways. Here the focus will fall on changes in housing, furnishings and smaller household goods which lead to increased practical, social and individual comforts. But first a few words about the owners. Acquiring durable and semi-durable goods could be costly, and owning items (particularly the more cumbersome ones) implied prerequisites such as land, housing or storage facilities. For this reason the owners of houses and of larger furniture and goods tended to be persons old enough to have accrued sufficient wealth to purchase them, or to take over the family farm. It is also this group which, as mentioned in chapter 1.6 is over-representative in the probate inventories. The previous chapter also showed how larger wealth naturally enabled a household to surround itself with more goods, while those with less, had to make do with less, without, or of lower quality. Durable and semi-durable goods are also found in other social and wealth groups, such as servants or middling sorts, but these goods tended to be of smaller size such as could be kept in a chest, not cumbersome beds or cupboards which required a house.345

5.1.1. Housing

Housing is a basic need for humans, and it can be made to be more than a shelter. Through changes in building techniques and materials it can become comfortable, providing not only protection from the weather, but also a homely and intimate sphere for a family. Studies in France, England and America show that significant changes occurred in early modern housing which facilitated this.346 Similar changes took place in Norway, and as in other places, the changes took time, varied socially and geographically, and were closely linked to upturns in the export sectors. The result was nevertheless dramatically improved living conditions.

345 This is often best seen in how the items in the probate inventories are split between the heirs. Tarald’s inventory from Stor-Elvdal (discussed in chapter 4) illustrates this well. The son and one daughter who both had their own households received the housing, furnishings and more cumbersome goods which often required roofing to store or protect it. The unmarried daughter was allotted more of the mobile goods such as animals or smaller household articles. These were easier for her to bring with her when moving.
The medieval Norwegian farm was made up of several wooden houses, most of them quite small and dedicated to different functions e.g. storage (stabbur and loft), sleeping (loft), barn, fishing shed, sauna, smithy, brewing and drying grain (ildhus) and the main dwelling house (stue). The organization and placing of the houses differed regionally, but in all people had to move between several houses to get things done. This way of organizing the housing continued well into early modern period.

The main house (stue) prior to the 17\textsuperscript{th} and 18\textsuperscript{th} century was made along two basic designs, but both were usually one-room, one-story houses of wood, and with earth, wooden or stone floors. The main room was where many of the household’s indoor activities took place, especially in the cold months. A porch was often built to protect from weather, and over time became one or two additional rooms. They differed in how the hearths were structured. In the eastern and inland part of the country the hearths (åre) were open and located in the middle of the room, while along the Western coast, in Northern Norway they were set against a corner of the house and closed (røykovn). Closed means the hearth was “boxed” in by stone, measuring about the same as a man both in height and width. Embers were raked from the hearth into a small caveat in front when preparing food. A closed hearth is depicted in drawing 5.1.

In both forms a constant draft from an open doorway to a hole in the roof was necessary to draw the smoke out and keep the fire alight. This meant that the room was seldom warm and that it tended to be smoky. A description of what it could be like to enter a main house in Setesdal, where the open hearth was still common, in the last decades of the 18\textsuperscript{th} century gives an impression of how it could be:

\textit{inside they [the houses] become quite black, like drying houses, from the smoke they continuously are filled with. They scrub the lower parts [of the walls] where the smoke is not so thick four to five times a year... but they are uncommonly uncomfortable firstly because one cannot see the sun, only a little light though a hole in the roof, and}

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348 Closed hearths were also used by Finnish migrants to parts of eastern Norway.
secondly ... such a cottage can never be warm in winter because the door must always stand ajar so the smoke can be drawn from the room and up through the opening in the roof. Thus, even with the largest fire, one can be scorched on one side when sitting on stools about the hearth, the household usually sits in a square formation, and yet cannot but freeze on the other side. It is therefore impossible to keep warm, not to mention the continuous smoke which is of much annoyance.  

Although Setesdal is known to have long adhered to the “old ways”, Parsons R. Gjellebøll’s description is harsh. It should be taken into account that he was part of the local elite, educated abroad, likely born into a “finer” family, and accustomed to chimneys and fire places. Those living in the house probably did not find the smoke, soot and draft so uncomfortable since they were accustomed to it.

The medieval housings structures, as well as the floor plans connected with the open and closed hearths were found in many communities well into the early modern period. They were gradually replaced by distinctly regional, vernacular housing. The new forms spread...
gradually, first amongst the wealthiest households, but also depending on when the housing needed replacement or significant repairs. All of these new forms had something in common; that there were more rooms, sometimes a loft or even two floors. Also, more functions tended to be gathered under one roof than previously. The moving of sleeping quarters especially for the nuclear family from separate sleeping houses to a loft of the second floor of the main house is one example, another is the incorporating of the brew house into the main house to form a kitchen, as occurred in the Jæren region in south-western Norway.\(^{351}\) These changes helped fulfill the growing demand for privacy and intimacy for the nuclear family’s members and guests. In the late 18\(^{th}\) and through the 19\(^{th}\) century the eastern Norwegian form spread to become the dominant form in most communities. Similar processes of house enlargement and room diversification occurred in other European countries such as Italy, France and England, but took place earlier, some places already in the late Middle Ages.\(^{352}\)

5.1.1a Chimneys and ovens

One of the most revolutionary changes in European, and also Norwegian, vernacular housing was the replacement of the hearth with the chimney and fireplace, and later ovens.\(^{353}\) Chimneys lead smoke directly outside, thereby making the constant draft from an opening unnecessary, removing soot, improving indoor air quality and reducing the fire hazard from stray sparks. Since ovens could be attached to all four sides of the chimney, as well as on floors above, it became possible to heat more rooms, thereby increasing the space in which households could work and socialize in comfort.

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Hutchison, Ragnhild (2010), In the Doorway to Development: An enquiry into market oriented structural changes in Norway ca. 1750-1830

European University Institute

DOI: 10.2870/19493
In France and England the chimney and fireplace became widespread as early as the 13th and 14th centuries, but at first amongst the wealthier households. With the exception of royalty, chimneys began spreading later in Norway, likely in the 15th century; first in the wealthy households in urban areas and along the Southern coast which had much contact with Germany where they were in use, and communities close to the Norwegian iron works. By the 17th and early 18th century they were found in most rural households in Eastern, as well as Southern Norway, even if poorer households had to manage with hearths well into the 19th century. In the South Western part and all the way up to Northern Norway, the closed hearths “røykovn” dominated in the late 18th century as it was more fuel efficient, and thus preferable in deforested regions. Drawing 5.1 shows a main house in Sogn (Western Norway) were three different forms of heating were used in a transition period.

**Picture 5.1: A closed hearth, a fire place and a cast iron stove**

![Image of a closed hearth, a fire place and a cast iron stove](image)

Picture text: During the process of changing heat sources, some households would experiment with the different sorts available. This drawing by Eilert Sundt in the mid 19th century of the interior of a cottage in Sogn shows a house with a closed hearth (røykovn), a fire place, and a cast iron stove. Neither the open or closed hearths had a

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chimney, but the stone in the closed hearth stored the heat and kept the room warm for longer, than the open hearth (åre). Embers were raked into a small caveat in front when preparing food. (Source: Sundt, E.: *Byggeskikk*, 1862)

Ovens, either of cast iron or clay, improved the comfort of a house. Both types stored heat far better than the open hearth or the fire place, and since they required a chimney, smoke was not a problem. In a description of the costal community Hitra in Trøndelag in 1780 smoke was no longer a problem, but the smell of human activity was: *The rooms...are very small and have low ceilings. These ... are in winter heated until very warm and filled with an intolerable odor from the wet clothes which are smeared with cod liver oil, leather skirts, trousers and boots which the fishermen each evening hang to dry by the stove (kakkelovn)...*357 The chimney and cast iron ovens also removed the soot, making it possible to decorate the rooms (as will be discussed later)358 Ovens first spread along the Southern coast were trade with Germany made them available. Communities close to Norwegian iron works were also quick to take up cast iron ovens, largely since they were sometimes used to pay for cartage of firewood and other work.359

The previous chapter indicated that improved comfort in the form of better heating and less smoke was a high priority for households. This is exemplified by the inventories from Herøy and Austrheim summarized tables 5.1 and 5.2, in part 5.1.3. Even though tenancy was widespread in both communities, and thus any cast iron ovens part of rented houses would not be noted, table 5.1 shows there was still an increase over time of ovens, from 3-6 percent in 1770(77)-95 to about 20 percent between 1796 and 1819 in both communities. This was a new trend and is confirmed by annotations in several of the inventories with registered cast iron ovens in which the main house was “newly built”. Table 5.2 shows that almost all of this increase took place in the wealthiest inventories valued at more than 201 rdl (1800 adjusted). The frequency of ovens also increased in the upper wealth group in the less market integrated


Austrheim. This strengthens the observation that they were highly desirable items. Similar trends have been identified in other communities. In Trysil cast iron ovens increased at the time when the community increased its engagement in the timber trade.\footnote{Løberg, L.: 1989, p. 110.} In Salten in Northern Norway ownership of cast iron stoves rose, especially around the mid 18th century, coinciding with a bonanza in fishing, the community’s main income.\footnote{Hutchinson, A.: 1992, p. 78-80.; Hutchinson, A.: 2009.} Contemporary authors writing from other parts of Norway, such as Wilse in Spydeberg and Strøm in Eiker and Sunnmøre confirm that cast iron ovens were spreading in the rural population, but first among the more wealthy farmers.\footnote{Wilse, J.: \textit{Spydeberg}, 1779, p. 290.; Strøm, H.: \textit{Sunnmøre}, 1762-9, p. 227.}

There were not only practical benefits with the cast iron ovens, they also increased aesthetic pleasure through their decorations, bringing European fashions into rural households as well. An example were the two and three story ovens made at Fossum iron works on which the sides were decorated with rococo ornaments, biblical or mythical motifs and even statues. In line with European fashions the decor changed in the 1770s to simpler decorative schemes such as flowers on a corrugated background, and again to the Empire style from about 1800.\footnote{Næs Jernverk: \textit{Nas Jernverks Kakkelovne} Faksimile of Næs Jernverks oven catalog from 1809 and 1825, Næs Jernverksmuseums skrift nr. 1, 2000.; Fossum jernverk: \textit{Fossum Verks historie gjennem 400 år}, Grøndal, Oslo 1939, p. 87.; Hamram, U.: \textit{Gamle ovner i Norge}, Huitfeldt forlag, 2000.; Nygård-Nilsen, A.: \textit{Norsk jernskulptur}, Næs Jernverksmuseums skrift nr. 3, Tvedestrand, 1998, p. 192-219 in part 1 and p. 7-84 in part 2.} For households with less money, the smaller single-story ovens had to suffice, but these were also often decorated, though very simply.

### 5.1.1b Brick, tiles, windows and facades

Wood was the main building material in Norwegian houses. This was easily acquired locally in most regions, and thus cost little. Taxations in probate inventories indicate that houses in Herøy were usually valued between 6 and 12 rdl, but could vary with wealth. Most rural Norwegian houses were built using a technique called “lafting” which involved stacking whole logs snugly on top of one another in alternating sequences, lock notching at the corners of the building. This made the houses easy to dissemble if the inhabitants wanted to relocate, or for the materials to be reused as parts in other buildings.
Even if wood was always the main building material in pre-industrial Norway, the changes in the vernacular housing were helped along by the gradual spread of bricks and tiles. Bricks made it easier to build taller and safer chimneys than the clay covered wood or stone previously used, and which was still in use in the 19th century by poorer households. Bricks were also used as foundations for houses. The shift to roof tiles also increased comfort as they were lighter and slicker than the turf or wooden boards used in many regions. This meant rain ran off the roofing instead of being absorbed by the turf or wood and causing humidity. Tiles also made possible a steeper roof angle which could be utilized as a loft for storage or sleeping, thereby increasing the living space.

As with changes to vernacular housing, bricks and tiles spread slowly. The 1776 law on chimneys to reduce fires noted that especially Northern and Western Norway were slow to adapt chimneys due to the lack of local tile and brick works. Tiles were first used on rural churches in the 17th century, and by the wealthy, but in the last part of the 18th century also by the farmer population. The spread of tiles was nevertheless patchy, and coincided with the proximity to tile works in Eastern Norway, or to the international market supplying Danish or Dutch tiles. In Lier (outside of Drammen) in 1761, tiles are now used by almost all, especially on the so-called front houses. In Høland parish tile roofs are only used by the wealthy and only on the front houses. Similarly in Idd parish in 1794, most of the roofs on the so-called outhouses are still covered in birch bark and grass turf, or with planks and cut-offs of logs; yet in several places tiles are used not only on the front houses, but also on

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366 Chimney building was supported by the state, which in an attempt to reduce fires caused by stray sparks in the smoke, imposed a law in 1776 demanding chimneys be installed in all new houses; even in rural areas. Transgressions were fined at 4 rdl, but exceptions were made for the poor and households located in places where the transport of bricks was difficult. Source: Res. 16.10.1776. ang. at de, som bygge nye huuse på landet, skal deri opføre skorsten. In Schou, J.H.: Forordninger; Nygård-Nilssen, A.: 1998, p. 63.
367 A thus far unused source to changes in housing is the Norwegian fire insurance company’s archives (Norges brannkasse). It was established in 1767 and insured buildings both in urban and rural areas. The selection of buildings insured will likely have a bias towards the more wealthy members of the population, but they can still be used to indicate change. Further work on this is needed. See also: Johnsen, O.A.: Norges brannkasse 1767-1942. Opprinnelse og utvikling, bd. 1, Den alminnelige brannforsikringen for bygginger, Den Norske brannkasse, Oslo, 1942, p. 189-224.
outhouses.\textsuperscript{368} No tiles are noted in the inventories for Herøy or Austrheim, and nothing is known about the roofing of the rented houses in these communities.

It should be noted that urban areas were also slow to take up bricks as the main building material despite several laws and incentives insisting on brick houses within town walls.\textsuperscript{369} Prior to around 1800 roof tiles were common in Christiania, and it was the only town with a handful of houses with brick facades. In Bergen, tile roofs were common, but few brick walls. Trondheim lagged even further behind.\textsuperscript{370} The preference for wooden houses may have to do with them being faster to heat than stone houses; however, the easy access to cheap timber is a better explanation for its dominance. Houses could be painted to resemble brick or limestone. This shows that local materials were adapted to look like what was perceived to be the ideal. An increasing number of households, also in rural areas, painted the outside of their houses. This decorated the façade, but also helped preserve the wood from rot. It was generally the wealthiest households which did this, such as the trader and guesthouse keeper Claus Paulsen Leganger in Herøy who painted all his houses red.\textsuperscript{371}

As windows let in light it has been argued that they represented one of two technologies (the other being coal) enabling the changes in especially English vernacular housing.\textsuperscript{372}

Contemporary descriptions from Norway indicate that they spread in the rural population in the second half of the 18\textsuperscript{th} century, even if the number and size of windows varied with wealth. In 1784 Hans Strøm wrote from Eiker that the usually two floor high main buildings on farms had many windows. From Idd parish it was at about the same time that farmers’ houses often had two sets of windows. They were common also in Rakkestad parish (all three in Eastern Norway). In Setesdalen (remote inland Southern valley), which still had vernacular


\textsuperscript{371} Probate inventory 22.12.1809 Claus Paulsen Leganger, Herøy. His inventory was the fourth wealthiest in the database for Herøy for the period 1796-1801. (Gross wealth of 770 rdl adjusted to 1800 prices).; Sundt, E.: \textit{Byggeskikk}, 1862, §Den Jæderske stueform.

\textsuperscript{372} Hoskins, W. G.: 1953.
housing reminiscent of long houses, windows had come into use amongst the wealthier households. In the Eastern inland community Stor-Elvdal windows were frequent, so much so that when the community established a spinning school 400-500 window panes were ordered, constituting 25-30 windows in the three story building.\textsuperscript{373}

Even in regions where the old hearths and cluttered farm house structures were still common, windows gradually spread. These were primarily set in the houses with no hearth, such as the houses were reserved for guests, but also within the main house.\textsuperscript{374} Tracing the spread of windows in probate inventories of Herøy and Austrheim has proven difficult as most of the deceased either rented their living quarters, and no details of the house is therefore provided, or, where houses were noted, windows appear to have been considered part of the building, and therefore were not registered specifically.

Improved lighting, as well as the absence of soot and smoke also made made it possible to decorate the inside of the house, increasing aesthetic comforts. Painting, carvings and tapestries helped brighten the room and break up otherwise monotone surfaces, but contrary to the paintings noted in studies of consumption in many other countries and amongst Norwegian elites, most of the rural Norwegian decorations were neither framed, on canvas or wallpapers.\textsuperscript{375} Instead they were part of other things and therefore seldom described in probate inventories. This is called “folk art” (folkekunsten) in Norway, “popular culture” as Peter Burke has termed it or “minor arts” by Daniel Roche. Helped along by the spread of planes, saws, chisels and imported dyes and paints enabling more detailed and colourful work this flourished in Norwegian rural farmers’ homes in the late 18\textsuperscript{th} and early 19\textsuperscript{th} century.\textsuperscript{376}


\textsuperscript{374}Strøm, H.: Sunnmøre, 1762-9, p.231.


The Norwegian folk art has been widely studied, and the discussions will not be entered into here. Instead decorations will be noted in connection with specific items.377

Paintings and decorations varied, often regionally, taking shape as geometrical patterns, flowery borders, or depictions of famous scenes from the Bible or even stories with roots as far back as the Vikings. Some regions stand out; of these Telemark with its “floral design painting” is the most often mentioned.378 The patterns and pictures were inspired by the possibilities of the materials, local tastes, as well as impulses from other communities and from urban and cosmopolitan culture. One therefore finds a mix, adoption and alteration of familiar styles such as rococo, renaissance or baroque, intertwined with local mythologies.379 An increasing number of households also chose to paint instead tar the outside of their houses. This both decorated and helped preserved the wood from rot, but was generally reserved for the wealthiest households such as the trader and guesthouse keeper Claus Paulsen Leganger in Herøy who had painted all his houses red.380

As such, changes in vernacular housing like floor plans, chimneys, ovens, tiles and decorations helped increase households comforts through enlarging the living space, reducing smoke, soot, drafts and humidity, improved heating, lighting and even the aesthetic decor.

5.1.2 Furnishings

But it was not only the living space which improved in comfort, the furniture and items filling it followed the same trend. In the old, medieval houses there were few furnishings, all of which tended to be centered around the open hearth in the main room. Benches filled with earth for isolation were set against the walls and used for sitting, working and sleeping on. Wooden chests (kister) were used for storing clothes, food and other utensils, and doubled as stools or tables if necessary. At the short end of the main room, placed behind a long table

377 For more in English about the Norwegian folk art see Burke, P.: (3rd ed.) 2009, p.7.
380 22.12.1809 Claus Paulsen Leganger, Herøy. His inventory is the fourth wealthiest in the database for Herøy for the period 1796-1801. (Gross wealth of 770 rdl adjusted to 1800 prices); Sundt, E.: 1862, §Den Jæderske stueform,
used for working and eating, was the high seat (høysete) reserved for the head of the household. The ax was the main carpentry tool, and furniture was therefore often thick and roughly hewn. If the barn was not part of the main house then animals were often let inside, especially in winter, since they helped provide heat.\textsuperscript{381} Even if many households continued to live at least partly in this way, changes took place in the long 18\textsuperscript{th} century making the living spaces more comfortable, cozy and intimate.

Contemporary descriptions from the 18\textsuperscript{th} and 19\textsuperscript{th} centuries indicate that most early modern rural houses were relatively simply furnished, and later studies support this. A general tendency was nevertheless an increase of household goods, and that these were more mobile, that is both lighter and no longer nailed down. Unfortunately the probate inventories are not detailed or trustworthy enough to confirm this. As soot was no longer a limiting factor in many houses, more efficient use of the room was possible, thus furniture began stretching up the walls. The spread of new tools, such as planes, enabled the making of finer items than had been previously possible, thus increasing the aesthetic comfort of things like furniture.

Drawing 5.1 and 5.2 show how a typical 18\textsuperscript{th} century rural Eastern Norwegian house was furnished. The drawings were made in 1862 by Eilert Sundt and show the old house at Løkkre farm in Lom (mountainous inland) which, according to the owner, had been relatively unchanged since it was finished in 1769.\textsuperscript{382} It should be emphasized again that in the long 18\textsuperscript{th} century several forms of vernacular housing were in use. The Løkkre farm house was not a standard, but it can be used as an example to get an understanding of 18\textsuperscript{th} century rural Norwegian furnishing.

There were some regional variations, but according to Eilert Sundt the items of furniture in rural houses were almost always the same, though the placing varied somewhat. Later studies support this.\textsuperscript{383} The high seat continued to be the husband’s place. Next to it was often set the

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\textsuperscript{382} Sundt, E.: \textit{Byggeskikk}, 1862, §2-§5.

household’s first window. The “long table” continued to be where eating and work took place, and benches and stools were the most common furniture for sitting (see drawing 5.2). But, as seen in tables 5.1 and 5.2 in part 5.1.3, more specialized seating in the form of chairs had begun spreading in the upper wealth group in the more trade connected Herøy. These were quite often noted as having some form of padding or decoration.

**Picture 5.2: Vertical perspective, angled towards the door. Løkkre farm, Lom.**

![Vertical perspective, angled towards the door. Løkkre farm, Lom.](image)

Source: Sundt, E.: *Byggeskikk*, 1862

In the Løkkre farmhouse cooking took place by the fireplace and was the women’s area. (see drawing 5.3). Here there was also a folding table to help with food preparation. A shelf for storing things like hats and mittens spanned the wall. Beneath was hung (in the 18th century) a decorative towel or cloth, but in Sundt’s time this was a declining fashion in Hedemarken which was highly commercialized or close to towns, while it was still in use in households in less market integrated communities in the mountainous inland.

In accordance with trends observed in other countries, furnishings became more specialized. Gradually beds reserved specifically for sleeping, replaced the multipurpose benches of previous times. These beds were usually built high for isolation, and often had carved

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384 Grøn, F.: *Om kostholdet i Norge fra 1500 og opp til vår tid*, Fotografisk opptrykk utgitt av Kildeforlaget, Oslo, 1984, p. 216.
bedposts with hangings. The latter stored heat and were decorative, and so increased the comforts of more privacy and better aesthetics. The timing of the spread of beds in rural households varied. Martha Hoffmann quoted claims arguing that the spread started as early as the start of the 18th century in Ryfylke (South western Norway) which was integrated in the North Atlantic economy, to the early 1800s in Gudbrandsdalen (inland Eastern Norway) which was far less integrated in the world economy. Identifying beds in probate inventories is difficult as they were often considered part of the house, and thus not specified. In both the Herøy and Austrheim inventories (table 5.1 and 5.2 in 5.1.3) beds were noted in less than 10 percent, and the overall majority of these were in the wealthier inventories. This is not surprising as lower wealth groups such as servants or traveling artisans, or households who did not own a house would not have a place to put it.

Picture 5.3: Vertical perspective, angled towards the fire place. Løkkre farm, Lom.

Storage furniture was long wooden chests. These took up floor space, would easily become untidy, and would rot if they were placed directly on the earthen floors. Chests were gradually replaced by cupboards in most rural Norwegian main houses during the long 18th century, and were instead used for longer term storage in the stabbur or loft. Cupboards were more

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comfortable since it was easier to find things in them than in a chest, and since the items were placed higher rot was less of a problem. The common cupboard design consisted of two covered parts separated by a shelf (as seen in drawing 5.2). The cupboard was the wife’s domain where daily food, as well as the increasing number of utensils were stored. The nicest items were displayed on the open shelves, and the cupboard doors were often painted, or decorated with wood carvings. In the corner of the room, close to the high seat, hung a smaller, often matching cupboard used for storing valuables such as farm documents. Above and between the cupboards was a shelf lined with items such as books. By the mid-19th century Sundt wrote that cupboards were being replaced by more “modern” furniture such as chest of drawers in areas such as Hedemarken in Eastern Norway which were deeply engaged in the market. Here cupboards were found only in old houses and servant quarters. 386

The inventories from Herøy and Austrheim in tables 5.1 and 5.2 in part 5.1.3 show a similar situation. Chests were the most frequent storage container, being present in between 50- 70 percent of the inventories. The frequency of cupboards increased from 8 to 15 percent in Herøy, but remained stable at just over 30 percent in both periods in Austrheim. Why the two were so different is difficult to say, especially since Herøy was often ahead in adapting other durable and semi durable goods. Chests were common in all wealth groups, whilst cupboards tended to be less frequent in lower wealth groups, reflecting that these groups had fewer possessions to fill them with. A more specified version of the cupboard was the writing desk which had a lid covering the dividing shelves and which could be folded down to be used to write on. This is found only in the wealthiest inventories.

5.1.3 Smaller household goods

More spacious and better houses, new roofing, chimneys, fire places, ovens, cupboards and beds were the physically largest changes in the furnishing of rural Norwegian houses. But these were not the only developments. Smaller, more semi-durable items gradually cluttered up more of the living spaces in all wealth groups. In the following section the spread of semi-

durable items such as artificial lighting, tableware, bedding, clocks and books will be discussed, as will if and how they changed preindustrial rural Norwegian society.

Important sources for studying the spread of smaller household goods are, as discussed before, contemporary descriptions and the secondary studies of artifacts. To supplement these, a database of probate inventories from the communities Herøy and Austrheim and sorted in wealth groups (discussed in the previous chapter) will be used. Again it should be emphasized that the two communities cannot be claimed to be representative for all of rural Norway. But because of their different ways of taking part in the market, they can illustrate very generally the implications of different forms of market participation. Because of the representativity and reliability problems inherent in probate inventories (see chapter 1.6) the results in table 5.1 and 5.2 should only be considered indicative.

Table 5.1: Share inventories from Herøy and Austrheim noting furniture and smaller items. 1770(77) to 1795 and 1796 to 1819.

<table>
<thead>
<tr>
<th>Item</th>
<th>Herøy 1770-95 (172)</th>
<th>Herøy 1796-1819 (93)</th>
<th>Austrheim 1770-95 (77)</th>
<th>Austrheim 1796-1819 (87)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beds</td>
<td>10</td>
<td>9</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Books</td>
<td>28</td>
<td>34</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Candle sticks</td>
<td>29</td>
<td>34</td>
<td>39</td>
<td>41</td>
</tr>
<tr>
<td>Cast iron stoves</td>
<td>6</td>
<td>18</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Chairs</td>
<td>3</td>
<td>13</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Chests</td>
<td>49</td>
<td>71</td>
<td>71</td>
<td>78</td>
</tr>
<tr>
<td>Clocks</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Cooking pots</td>
<td>52</td>
<td>81</td>
<td>71</td>
<td>82</td>
</tr>
<tr>
<td>Cupboards</td>
<td>8</td>
<td>15</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>Mattresses and duvets</td>
<td>13</td>
<td>16</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>Plates</td>
<td>24</td>
<td>53</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Writing desks (skatoll)</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

(The number in brackets show how many probate inventories in each group)
Table 5.2: Share inventories from Herøy and Austrheim (1770 (77) to 1819) noting furnishings and smaller items, sorted in 1800 price adjusted wealth groups.

<table>
<thead>
<tr>
<th></th>
<th>Herøy Shares 1770-95</th>
<th>Herøy Shares 1796-1819</th>
<th>Austrheim Shares 1777-1796</th>
<th>Austrheim Shares 1796-1819</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 100 rdl (70)</td>
<td>Btw. 101 -200 rdl (59)</td>
<td>Less than 100 rdl (43)</td>
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<td></td>
<td>More than 201 (43)</td>
<td>Btw. 101 -200 rdl (15)</td>
<td>More than 201 (22)</td>
<td>More than 201 (11)</td>
</tr>
<tr>
<td></td>
<td>More than 201 (11)</td>
<td>Btw. 101 -200 rdl (15)</td>
<td>More than 201 (11)</td>
<td>More than 201 (5)</td>
</tr>
<tr>
<td></td>
<td>Less than 100 rdl (56)</td>
<td>Btw. 101 -200 rdl (15)</td>
<td>Less than 100 rdl (41)</td>
<td>Less than 100 rdl (66)</td>
</tr>
<tr>
<td></td>
<td>More than 201 (25)</td>
<td>Btw. 101 -200 rdl (15)</td>
<td>More than 201 (16)</td>
<td>More than 201 (5)</td>
</tr>
<tr>
<td></td>
<td>More than 201 (15)</td>
<td>Btw. 101 -200 rdl (16)</td>
<td>More than 201 (16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>More than 201 (5)</td>
<td>Btw. 101 -200 rdl (15)</td>
<td>More than 201 (11)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Herøy</th>
<th>Austrheim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beds</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Books</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Candle sticks</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Cast iron stoves</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Chairs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chests</td>
<td>36</td>
<td>34</td>
</tr>
<tr>
<td>Clocks</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cooking pots</td>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>Cupboards</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Mattresses and duvets</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Plates</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Writing desks (skatoll)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(The number in brackets show the number of probate inventories in each group)
5.1.3a Lighting

The spread of artificial lighting such as candles and items to hold them such as lamps and chandeliers is often emphasized in studies of consumption in other countries as typical consumer goods of the long 18th century. In Norway such items were rarely noted in topographic descriptions, and the probate inventories are only of limited help as the most common lighting required no or few utensils and was consumed. The comforting and symbolic value of lighting in pre-electricity lives should not be overlooked. Having light obviously helped keep darkness at bay for longer, and provided some comfort at nighttime. The symbolic importance is reflected in the use of much light at festive occasions and even the emphasis on well-lit rooms in fairytales.

Birch sticks were the oldest form of artificial lighting, but even if they burned bright, the flame was short. In coastal areas cod liver oil with a wick became increasingly common as the fisheries expanded, whilst tallow candles were made in areas with abundant meat and dairy production. Both provided light for longer than the birch twigs, but were also sooty and smelled of fish or burned fat. Candles made of bees wax were odorless, and thus the most appealing lighting, but as they were imported goods and therefore also the most expensive, they had to be used sparingly. To hold the candle, candlesticks made of wood or precious metals like pewter or copper were used, but they could also be set directly on a table. Candle sticks of reflective metals would add a sparkle to any occasion they were used.

Precious metal candlesticks can be found in probate inventories. They can be used as an indicator of artificial lighting at special occasions, but say nothing about everyday lighting. Table 1 and 2 shows there was a small increase over time in candlesticks registered both in Heroy and Austrheim, but that they were far more frequent amongst wealthier inventories. Candle sticks present in more of the Austrheim inventories reflects a typical trend in the Strile region in which precious metals were used as a form of savings. This was typical of

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economies less linked to the developing market economy compared to places like Herøy where more of the gross wealth was tied up as credit or loans to merchants.

5.1.3b Tableware

Changing trends in eating lead to more socially acceptable “table manners”. The most marked of these was the shift away from eating from a communal bowl to servings on individual plates. This increased personal and individual comfort. The spread of the new dining trends varied, influenced by closeness to markets and market integration.391

The inventories of Herøy and Austrheim exemplify well the differences in the spread of tableware over time and between wealth groups. Table 5.1 shows that the numbers of plates doubled in Herøy between the two time periods, rising to about 50 percent, while in Austrheim the frequency of plates was relatively stable at respectively 16 percent and 18 percent. There was little change in the social distribution of plates in the Austrheim inventories, whilst in Herøy plate ownership increased from 7 percent to 38 percent in the lowest wealth group. The difference in distribution and social spread is best explained by Herøy being more integrated in the market which enabled more people to have contact with changing trends, as well as economic resources to follow them.

Looking at the average number of plates in inventories in table 5.3, it is clear that few households had enough plates to enable all its members to have one each. It is therefore necessary to ask how plates were used. Most likely they had several functions spanning from individual plates as we know them today, to serving platters, and it is likely that usage varied depending on the occasion and social standing. The plates were of pewter, stoneware and wood, and the material probably also influenced the use; pewter plates for special occasions, wooden ones for everyday meals, and stoneware possibly in both. Surviving wooden tableware shows that these could be finely decorated, but those utensils were not used daily. Recent studies and archeological excavations reveal that finely decorated pottery became

widespread in ordinary households in the clay rich Trøndelag area in the long 18th century, but the spread of this material declined with distance due to transportation difficulties. In the early 19th century tin also became more widespread in utensils like buckets and cups. As pewter, stoneware and tin are materials which households could not produce themselves, finding them in the inventories indicates that they had been acquired through exchange and engagement with the market.

Table 5.3: Average number of plates, books and cooking pots in inventories containing such items. Herøy and Austrheim, 1770(77)-1819.

<table>
<thead>
<tr>
<th></th>
<th>Herøy</th>
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<tbody>
<tr>
<td></td>
<td>1770-1795</td>
<td>1796-1819</td>
<td>1777-1795</td>
<td>1796-1819</td>
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<tr>
<td>Plates</td>
<td>Less than 100 rdl (70)</td>
<td>1,8</td>
<td>12,5 (8,3)*</td>
<td>2,4</td>
</tr>
<tr>
<td></td>
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<td>2,5</td>
<td>12,6</td>
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<tr>
<td></td>
<td>More than 201 (43)</td>
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<td>2,5</td>
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<tr>
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<td>5,3</td>
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<td></td>
<td>More than 201 (22)</td>
<td>2,7</td>
<td>2,8</td>
<td>5,3</td>
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* 8,3 if the inventory with 146 plates noted in the probate inventory after a guesthousekeeper is taken out. The plates were likely not for household use.

Other eating utensils frequently discussed in studies of household consumption are table cloths and napkins which helped increase cleanliness and aesthetic comfort. Such items were rarely mentioned in contemporary Norwegian literature, and were only noted a few times in the Herøy and Austrheim inventories, and then primarily amongst the wealthier inventories. Most people would instead eat directly off the wooden table and wipe their hands on their

clothes. Comparatively, Lorna Weatherill’s study of material culture in England shows that 30 percent of the farmers’ inventories from rural areas or villages between 1675 and 1725 had table linen of some sort, indicating that ideals of delicate dining manners had reached a wider range of the population.

A related item deserving attention is the cooking pot. It was frequently one of the most expensive items in inventories and was vital for food preparation. This explains why it was found in between 50 percent and 80 percent of all the inventories in Herøy and Austrheim. Not all owned pots; some were innerster, children or servants who did not need one as they ate the communal food provided by the household. Poorer households would sometimes share pots, or pawn a share of a pot. The high frequency of pots coincides with Lorna Weatherill’s finds in rural areas and villages in England, where cooking pots were found in 66 percent of farmers’ inventories and 74 percent of traders, and more frequently in urban and wealthier inventories. Table 5.3 shows that wealthier households tended to have more cooking pots. In part this is explained by the fact that such households were often larger and also had more guests. Owning several pots also made it possible to make more diverse meals, thus experiencing the comfort of new and different tastes. Such dietary habits first spread amongst the wealthy which is not surprising given their economic resources and often larger market participation. This was also Lorna Weatherill’s conclusion to the difference in spread and assortment of cooking pots in urban and rural areas of England. (Changing diets are discussed more in the next chapter)

5.1.3c Bedding

Bedding was an important source of comfort everywhere, and in cold countries like Norway it was vital for survival. No systematic studies have been made on bedding, but compiling miscellaneous studies and sources help draw a picture. The most basic bedding was straw, covered with skins, fur or blankets. Sheep skins and cow hides were widespread in the mountainous inland and Northern Norway, most likely because these areas often had meat

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and dairy production, and thus easy access to hides and skins. Blankets were also common, often combined with hides and skins. Duvets and mattresses were finer and more comfortable bedding spreading in the long 18th century. In their simplest forms these were filled with straw, but the finest were packed with feathers or down.

The inventories from Herøy and Austrheim confirm the diffusion of duvets and mattresses, but feather stuffed bedding appears to have been far more common in the latter community. This may be a anomaly from the samples, but several fowl houses, which are rarely found in other inventories, were noted in the Austrheim inventories. As noted in chapter 4 fowl and eggs were likely products for the Austrheim people to sell to Bergen, and the feathers were thus left over, and could be used for bedding. Bed linens, duvets and mattresses also improved health and comfort. Duvets and mattresses insulated better than blankets and hides, keeping people warmer, and sheets and covers protected from prickly hay mattresses or old hides. Sheets are also rare in Herøy and Austrheim, which is probably explained by their lack of linen production. Decorative blankets (åkle) also covered the bed, either hanging from the bed frame or draped on top.

Usage of duvets and sheets was only slowly spreading in rural households and this is confirmed by the topographic description from Seljord, Telemark saying that their bed linen is ... simple... Duvets and sheets are only used by the wealthiest ... Most people, instead just place a woollen blanket 3 alen(0.63 m) long and broad and valued at 1 ½ rdl, on the straw. This serves as both mattress and sheet. A similar blanket is used as cover, on top of which is a fur made of six grown sheep skins tanned on one side, but with the fur on the other, valued at 1 rdl. Decoratively woven blankets, often depicting stories, covered the beds or were used as hangings. By mid 19th century Eilert Sundt noted that the pictures had been replaced by simpler, geometrical lines and patterns. The shift is partly explained by the spread of the flat loom which took over for the old standing loom, the latter being better suited for weaving

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pictures than the former. However, since flat looms are more time efficient, it also indicates that households had less time to spend on making decorations.

5.1.3d Clocks and books

Smaller items such as clocks and books gradually came to occupy the living spaces of pre-industrial households. These provided the individual with the comfort of knowledge and precision. Long case clocks spread from urban to rural areas in the long 18th century. First to the local elites such as priests or military officers who needed them in their work. But towards the turn of the 19th century clocks could be found on an increasing number of farms, and even cotter places. A study of the community Fåberg, where clocks were made, show that prior to 1789 only a few probate inventories record clocks, but between 1789-1802 they were noted in 60 percent, and between 1827-47 in 70 percent of the inventories. Contemporary descriptions of furnishings in Eiker, close to the towns Drammen, Christiania and Kongsberg in 1784 mention that clocks, together with mirrors, tables and chairs of the sort only found in wealthy household’s quarters in other communities had become more common. Comparatively Lorna Weatherill registered clocks in 15 percent of the inventories between 1675 and 1725 of farmers in rural areas or villages.

The spread of clocks was nevertheless patchy, largely dependent on price and closeness to producers or urban markets. This explains why in table 5.1 there were only three clocks in the Herøy probate inventories and two in Austrheim, mostly in the wealthiest inventories. In the mid 19th century Eilert Sundt commented that even if long case clocks were common in Gudbrandsdalen (inland Eastern Norway), they appeared to be relatively new since, unlike other furniture, they had no designated place in the house.

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405 Sundt, E.: Byggeskikk, 1862, note. 51.
Books were another consumer item which became increasingly widespread in pre-industrial Europe, and this also happened in Norway.\textsuperscript{406} The market for books was significant in Norway as schooling in Christianity and literacy was made obligatory in 1736 and later in 1739.\textsuperscript{407} By the end of the 18\textsuperscript{th} century the majority of the Norwegian (and Nordic) population were therefore literate. This was high compared to other countries; the British literacy rates were 50 percent for males and 25 percent amongst women in 1780, 10 percent in Russia in 1850, and 25 percent in Spain and Italy. The Norwegian are, instead similar to the rates in the American colonies where the majority of the population could read at the time of the revolution.\textsuperscript{408}

Books enabled new experiences and knowledge. Studies of 18\textsuperscript{th} century books and literacy in Norway all indicate that there was an actively literate public consisting of not only the elites, but also the rural farmer population.\textsuperscript{409} In Sunnmøre the share of inventories in which books were noted varied from about 30 percent in 1752-65, to 45 percent in 1766-79, falling to slightly less than 30 percent in 1780-89 as income from fisheries declined, and gradually rising again to about 45 percent in 1800-8 as the fishing slowly improved. This was far more than the 6.5-7.5 percent for the 18\textsuperscript{th} century in Sjælland in Denmark, but less than Båhuslen in

\textsuperscript{406} Burke, P.: (3rd Ed) 2009, 342-352.
\textsuperscript{409} Studies of the literature owned by pre-industrial households shows a numerical dominance of moral and religious books. In Fet’s study 43.6% were prayer books (30 titles), 32.8% printed sermons (68 titles), 26.7% psalms (79 titles), 4.7% moral books (118 titles) and only 2% “worldly literature” (179 titles). The latter included history, geography, mathematic, languages, natural sciences and law. The book advertisements in the Christiania paper Norske Inteligræs Sedler indicate the same religious dominance. These studies do not reflect the sharing of books enabled by reading societies, local libraries and book collections. Nor do the readership of newspapers which in the last part of the 18\textsuperscript{th} century were read by between 5-10% of the adult Norwegian population in Denmark-Norway, a dramatic rise from the 1% in estimated for 1720. The popular literature in the form of printed songs such as those advertised for in the newspaper Bergens Adresse Contoir as “a forest song, a love song”, as well as “a sailor’s song” is also not reflected in Fet’s study. Sources: Fet, J.: 1995, p. 132, 274-294.; Norske Inteligræs-Sedler, 1763, 1773 and 1823, Christiania.; Bergens Adresse Contoir, Bergen, 1777-1804.; Kjærgaard, T.: “The rise of press and public opinion in eighteenth-century Denmark, Norway”, SJH, vol.14, nr. 3/1989.; Byberg, L.: 2007, p. 90-99, 105-6, 218-54, 311.; Thue, F.W.: Christiansand, 77, hefte 16, 1796.; Bergens Adresse Contoir, nr. 29/1794.; Burke, P.: (3\textsuperscript{rd} Ed.) 2009, p. 341-3.
Sweden which had more stable incomes from fisheries. There the share of books noted in inventories rose from 30 percent in 1752 to more than 50 percent of the inventories in 1808. It is also far more than the 14 percent of the farmers’ inventories in rural areas and villages between 1675 and 1725 which Lorna Weatherill found in her before mentioned study.410

Proximity to markets also impacted on book ownership. Higher book ownership statistics were found in rural areas close to towns with booksellers, or areas with close contact to Danish or Dutch markets. The wealthiest households owned the most, but towards the end of the 18th century, all but the very poorest households, usually had at least one or two books.411 The difference in market integration helps explain why Austrheim had a lower frequency of books than Herøy (as found in tables 5.1, 5.2 and 5.3). Studies of buyers at book auctions similarly show that all groups of rural people purchased books, but few travelled far to do so.412 Nineteenth century studies of book ownership in the poorer areas of Christiania confirm that the lower strata of society also formed part of the literate public.413 A study of 294 households shows that each household had on average 19 books and 4 newspapers, but when divided into social groups, book and newspaper ownership was, unsurprisingly, highest amongst lower state officials and lowest amongst servant girls.414 The fact that books could be more common in rural areas like Sunnmøre is also partly explained by the low weight of books which made them easier to transport than say, long case clocks.

5.2 How were the changes possible?

In chapter three the early development of the Norwegian internal market was discussed, and showed that new retail forms, the higher number of urban settlements and relaxed trade laws increased the availability of goods. But who in the rural communities took these up or facilitated the spread of the trends? Many of the trends which these changes spread were first picked up by the wealthiest in the rural communities who had surplus resources to invest in goods which could emphasize their social standing. Over time, these goods gradually spread

413 Sundt, E.: Om Piperviken og Ruslokbakken, 1858, § 24.
414 The newspapers were counted as separate issues, not for the whole year. Children’s school books were left out.
to other social groups. Tiles are an example of this; first being used on church roofs, before being taken up by the wealthier households, and later, in places with easy access to tiles, also by a wider share of the population. The probate inventories from Herøy and Austrheim (table 5.2) also indicate this was the case for cast iron stoves and plates, but for other goods the probate inventories are too unreliable to make it possible to identify trends with any real certainty. Officials actively tried, through the use of pamphlets, prizes, information and by example to diffuse goods they perceived as beneficial for improving living standards. This hints at that some parts of the changes were introduced from above. Local opposition was frequently noted in the case of new production technologies, but rarer in the case of new consumer goods, and then mainly for economic, and sometimes for religious reasons.

But not all the changes came from the top, some were spread from below. Examples of such are servant girls who having seen how wealthy households were run, wanted their own households emulate them as far as possible, even if it was only through a few items such as plates, or the floor plans of their house. Similarly, as discussed in chapter 3, by going on town trips, rural people brought home ideas and ideals of consumption. Whether this can be called direct emulation is uncertain as rural people often would adapt the items to local materials and tastes. Similarly, itinerant rural artisans brought with them trends which again were influenced by the taste of the producer as well as the employer.

But even if the channels for the spread of new consumer trends increased, changing economic conditions enabled more households to acquire many of the goods. In his article “The great re-building of England, 1570-1640” W.G. Hoskins argued that the causes of the improvements in housing standards (which included furnishings) were threefold. 415 Firstly, households’ expenditures stabilized, becoming more fixed and predictable. Secondly, households’ property rights and tenure became more secure, and thirdly, incomes rose because of a widening gap between purchase and sales prices. These same structural changes took place in rural Norway in the long 18th century, and help explain the spread of durable and semidurable goods.

5.2.1 Predictability and security: taxation and rents

No overview of taxation in 18th century Norway has been made, but certain trends can be identified. From the 17th century and until the end of the Great Nordic war in 1720, taxes were kept at a high level. The 18th century was also characterized by the imposing of several smaller taxes to cover debts acquired during the Great Nordic War, or for new institutions like compulsory schooling or roads. Added together they could, especially in times of dearth, be harsh, and protests and complaints occurred several times during the century.416

Towards the end of the 18th century taxes appear to have stabilized, and possibly declined, making annual expenses more predictable for households. The budgets discussed in the previous chapter indicate that all together taxes made up about 3 percent in Trysil and 7 percent in Sunnmøre in 1764, just two years after the Strile tax rebellion. But there were annual and geographical variations. The extent of market participation also influenced how rural households experienced the tax burden. But even as the number of smaller taxes increased, the land tax in real terms declined. The land tax changed little between 1660 and 1838, meaning that improvements were not subject to taxation, resulting in most cases in declining annual relative expenditures for the owners. With the onset of the Napoleonic war taxation rose again.

Property rights also became more secure through the long 18th century. At the start of the century most farmers were tenants, but over time (see chapter 2) landownership became increasingly widespread amongst the population.417 Throughout the century, legislation ensured relatively secure settings for tenants; tenancy was regulated by mutual contracts for life, often passing on to the next generation.418 Even if tenants’ rents were regulated and often

low, they also paid other fees which were not regulated, such as when taking over the farm, and expenses could be high. In 1723 tenants were given the right of first bid on the land they rented. Land purchases varied geographically and over time, the trend began in Eastern Norway, and followed later in the Western regions, reflecting the changing economic conditions in these regions. Security for cotters increased through laws in 1750, 1752 and 1792 which guaranteed written contracts, thus reducing the danger of being cast off the land.

5.2.2 Breakability

Contemporaries noted that with the exception of accidents like fire or war, households primarily implemented changes to vernacular housing when they had surplus resources to do so. Such surpluses were the result of an increasing gap between the prices of buying goods from the market, relative to the price received by the household for its produce. Changing prices of produce have been partly discussed in chapter 2, but as durable and semi-durable goods began to decline in price due to “breakability” cause by increased availability and declining quality, the spread of goods should be seen in the context of changing relative prices.

Making do with what was at hand had always been the attitude rural people had adopted, but what was new in the long 18th century was the spread of preindustrial mass produced goods which were more “breakable”. This mass production took shape as an increase in the number of rural artisans with little formal skills, and who were often accused of tinkering (fusking), entered the scene. Cottage industries and a few rural manufactories produced more standardized goods for a mass market. Sometimes they developed more efficient production processes than the former master craftsmen. This enabled larger production and lower prices, but also often implied declining quality. The declining price also enabled faster replacement.

of the goods, and helped speed up changing fashions, thus reducing the lifetime of the item. The increase in the number of rural shops, small towns, auctions and peddlers discussed in chapter 3 helped make the goods more available to those living in distant communities. Proof that goods became more “breakable” can be found by looking at changing relative prices, the spread of more efficient technologies and at the changing number of producers of such goods.

Lacking Norwegian price series, Danish price series of iron and tiles relative to timber and fish have been used to gain an impression of changing relative prices of some manufactured durable and semi durable goods increasingly available on the Norwegian preindustrial market. As noted in the introduction, the price series should not be assumed to be precise, but it can be used to capture general trends over time423.

Figure 5.1: Iron and tile prices relative to price of 10 alen, single deals. 1750-1800 (Danish prices).


423 Norwegian historians have tended to use cow prices to exemplify changes in relative prices. This is based on the general observation that most Norwegian households had a cow, and that the price of cows are relatively easily found in probate inventories. Most have only used this to exemplify, and thus no systematic series can be possible to compile. Only one study has mapped changing prices of cows systematically. This did so in four communities known either for grain or husbandry production. Communities involved in fishing, mining or sailing were not included. This article was written by Valen-Senstad, F.: “Krøtter- og korntakster 1700-1850”, Maihaugen, 1964-68, Lillehammer.

Hutchison, Ragnhild (2010), In the Doorway to Development: An enquiry into market oriented structural changes in Norway ca. 1750-1830
European University Institute
DOI: 10.2870/19493
Tiles, as noted above, spread gradually in rural Norway. In part they were domestically produced by rural producers, especially in Eastern, inland Norway. But along the Southern Norwegian coast tiles from Denmark or the Netherlands were not uncommon. There were no customs on Danish tiles. The cost of shipping them to the Norwegian coast was small, and so the Danish tile prices were likely to have been relatively similar to the sales on the Norwegian coast.\textsuperscript{424} Figure 5.1 shows that relative to timber prices (deals were boards/planks), the price of tiles declined, while compared to herring in figure 5.2 tile prices rose. In the fishing sector the blow was somewhat lessened by the comparative stability in relative prices of berg fish and spilt cod to tiles (see figure 5.3). This coincides with the economic cycles which the timber and fishing sectors were in (discussed in chapter 2).

\textbf{Figure 5.2: Iron and tile prices relative to herring prices, 1750-1800 (Danish prices).}

![Image of graph showing iron and tile prices relative to herring prices from 1750 to 1800](image)


In inland areas the tiles cost more because of transportation expenses. A contemporary calculation by the local official Claumann in Telemark indicated additional costs of 2 rdl per 1000 tiles to transport (including breakage) them from Brevik (on the coast) to Heddal

\textsuperscript{424} For. 17.05.1762, Toll, Consumpsjon og Accise i Danmark og Norge, Christian den 7des forordning; 26.11.1768, Toll, Consumpsjon og Accise i Danmark og Norge, Christian den 7des forordning. In Schou, J.H.: \textit{Forordninger}.  

Hutchison, Ragnhild (2010), In the Doorway to Development: An enquiry into market oriented structural changes in Norway ca. 1750-1830
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(Eastern Telemark) a distance of ca 86-100 km. Nevertheless, Claumann argued that in the long run, tiles were cost efficient since they would last a century, whilst wooden roofing commonly used needed replacing every decade or so and cost future timber profits. Claumann had personal interests in tile production, but other sources confirm both the high transportation costs, the need to frequently renew wooden roofing, as well as the longevity of tiles. In the probate inventories for Herøy and Austrheim 640 bricks were noted in 1790 in the inventory of Adelus Jacobsdtr, one of the wealthiest people in the database. These were valued at 4r 9 skilling.

Figure 5.3: Iron and tile prices relative to prices of berg fish and stock fish, 1750-1800 (Danish prices).


425 From Brevik on the coast to Heddal in the inland of Telemark it was calculated that transportation cost 2 rdl per 1000 tiles, whilst the price paid in Brevik was 2 rdl. RA, Oslo, Rentekammeret, 2. Søndenfj. Kont., Kr.sand distr., In. Saker, pk. 150, teglverk, Oslo. Application for Privileged from Claumann, 1774. I am grateful to Anna Tranberg for this source.
426 The trip today is ca 86 km long, but as it is likely that they in the 18th century would have used water ways as much as possible, thus the stretch would have been about 100km. Transport on water was cheaper both due to reduced breakage and the weight of the tiles, compared to overland transport.
428 To get tiles from Drammer to Hamar a farmer paid 27 rdl for the tiles and 17 rdl for the transportation in 1762. Gjestvang, O.: 1992, p. 50.
430 Probate inventory: 12.4.1790 Adelus Jacobsdtr, Kirkesand, Vannylven.
Durable goods like cast iron stoves and cooking pots were made of iron, and priced according to their weight in pig iron. Bar iron is most commonly used in price studies and follows the same trend as pig iron, and can therefore be used as an indicator of price changes in iron goods. Norwegian iron had been granted monopoly rights in both Denmark and Norway providing the price was kept below 11 rdl pr skipund (160 kg). This must have impacted on the price, however no thorough studies of the monopoly have as yet been made. Even if (often illegal) Swedish iron was available in parts of Norway, most rural Norwegian households would have had the Norwegian iron available. It is therefore most relevant to look at relative changes in the price of Norwegian iron. The fact that the prices are Danish probably makes them somewhat higher than in Norway due to the additional transport costs. It should nevertheless be noted that no place in Denmark would be any further away from the Norwegian iron works than many Norwegian communities. The prices can thus only indicate trends.

The relative trends of iron prices relative to timber and fish indicate that in timber rich areas iron goods declined relatively in price. The fact that durable goods like cast iron stoves were more widespread in the timber rich eastern regions helps support this. In communities such as Austrheim relying on herring, the relative price of iron rose (see figure 5.2), whilst communities like Herøy, which shifted to cod and made stock fish or berg fish (klipp fish), the relative prices shifted comparatively less (see figure 2.3). The relative iron prices would similarly influence prices of iron goods like cooking pots or iron tools, helping to explain the different spread of cast iron ovens in the two communities. Clay ovens were also available at this time, but little is known of them because the fire gradually consumed their walls and none (but those from the 19th century) have survived to date. Their shorter lifespan and fragility would have rendered them cheaper than those made of iron.\footnote{Opstad, L.: 1990.} Interestingly a \textit{clay English oven} was noted in one of the inventories from Stor-Elvdal discussed in chapter 4. It was valued at 8 riksdaler, and thus was the most expensive item in the inventory. Nothing is said of its age, or why it was termed “English”. Compared to other cast iron stoves noted in other inventories in Stor-Elvdal valued at respectively 12 rdl and 9 rdl, the clay oven was slightly cheaper.
In the early 19th century technological changes occurred in production which enabled not only more increased efficiency, but also thinner iron and steel. For ovens this meant that the walls became thinner and the heating capacity and fuel efficiency improved, thereby reducing the price as well as improving their function. Increased fuel efficiency was especially appealing to households in deforested regions of Western Norway.\textsuperscript{432} As the new iron became available on the Norwegian market after the Napoleonic wars, cast iron ovens made using the new techniques spread at great speed through the rural Norwegian population. The new iron stoves were nevertheless more breakable since the walls were thinner and therefore consumed faster than with the old form.\textsuperscript{433}

Another example of an item or commodity which increased in “breakability” was glass. Glass was of course a “breakable” material, and for as long as its availability was restricted to imports it remained too expensive for most households. The establishing of a domestic glass production sector reduced transportation costs and import tolls, and thus likely decreased its price. Equally important was the spread of a new and cheaper production technique called “taffel glass” which helped make production more efficient, thus further reducing the price.\textsuperscript{434} The assortment of window glass varied, from the cheapest “ordinary green window glass” to “læger glass” which was a finer but still affordable taffel glass\textsuperscript{435}, up to the most expensive “crown glass”. The increased assortment of glass, as well as the production of 800 000 bottles in 1790 and 950 000 in 1810 enabled a wider range of the population to acquire glassware.\textsuperscript{436} Unfortunately sufficiently complete price series are unavailable to make a relative price study for glass.

\textsuperscript{433} I am grateful to Petter Øijord in Fortidsminneforeningen in Drammen for explaining the breakability of cast iron ovens. It is thought-provoking that today cast iron ovens are not guaranteed to last more than 20 years, while they in the 18th century could last for centuries. Also Gunnar Molden at Næs iron works museum has been of invaluable help with regard to information about iron and cast iron oven production.
\textsuperscript{435} Crown glass was made by blowing glass into big globes, which were opened at the top and spun into a circular flat surface. Taffel glass was blown as a “valse”. The taffel glass was much more uneven than the crown glass.
The Norwegian internal market forming in the long 18th century (as discussed in chapter 3) meant that regional specialties could reach a wider market. The increased availability of artificial lighting was an example of such, as tallow candles and fish oil from the Western coast were increasingly sold in Eastern Norway. There had been regular cartage of tallow candles from Hardanger over the mountains since the 1650s, but in the 1755-7 the trade had grown to between 1 139 våg (21 094 kg) tallow and 221 våg (4 092 kg) tallow candles shipped from Bergen to Southern and Eastern Norway. Much went to the iron works, but households producing neither probably also purchased them, at least for special occasions.437

Smaller items such as bedding, and most tableware (especially wooden tableware), were generally made by the household itself. Increasingly specialized artisans also produced these commodities, but little is known of their production methods other than that in some cases whole farmsteads, often of cotters, would specialize in producing an item, such as wooden boxes.438 Systematic price studies of such goods are difficult to conduct as price lists are not available, and probate inventories are neither specific enough in their descriptions of the items, nor can be assumed to reflect the market price of new items. Rough comparisons of the prices of chests in Herøy in the early 1770s and the early 1790s, before inflation took off, show that they were taxed at about the same rate (of course with large variations depending upon quality). Taking into account annual inflation, as discussed in chapter 2, chests would overall have become cheaper over time.

Clocks provide clearer example of declining prices, while the situation is somewhat different for books. At first, clocks were imported, usually from England, and made of expensive materials like brass. In the 18th century, knowledge of clock making spread to rural areas of Norway, which in turn increased their availability.439 From around the turn of the 19th century mass-produced clocks from Mora in Sweden and Swartzwald in Germany usurped the

439 Buggelands study shows that the community Fåberg in inland Eastern Norway was a clock producing centre, however according to the 1801-census there were 115 clock makers spread all over the country (likely there were more since the census is known to have under registered professions). Digitalarkivet: 21.9.2009: 1801-census: http://www.digitalarkivet.no/cgi-win/webcens.exe?slag=visbase&sidenr=15&filnamn=f1801&medbilete=&sokpostnr=1#a0
Norwegian clock producers. The foreign clocks were made of cheaper materials and sold only the clockwork and face, the buyer had to provide the casing. This reduced both production and transportation costs, and made it possible to supply a wider share of the rural Norwegian population with foreign clocks at prices which even cotters could afford.\textsuperscript{440} The declining quality of the clocks also helped reduce prices.

The printing press is well known for enabling the mass production of books.\textsuperscript{441} At the same time the spread of the printing press and an increase in paper mills enabled relatively low priced book production.\textsuperscript{442} This was reflected in the increase in number of book printers and sellers in Norway from only one in 1648 to 20-21 in 1800. In addition, the common language and customs union with Denmark facilitated the spread of Danish books on the Norwegian market.\textsuperscript{443} In the Herøy inventories, books were priced from 2 to 3 riksdaler for bibles, to only a couple of skillings for unspecified books, reflecting the variety available.

But breakability also meant that the life cycle of many durable and semi durable goods became gradually shorter. This is clearer in today’s society, but traces of the beginnings of this can be observed in the pre-industrial period. In previous times an item usually had many functions; such as benches which could be sat on, slept on, and worked on. Or, as with pewter and silver, could be remoulded. Such multi-use items were gradually replaced by goods which had fewer functions and which could be recycled into fewer things. Examples of such were glass, or stoneware and tableware which, once broken, were of little use; or specialized furniture such as padded chairs and sofas, which could only be used to sit on. This aspect of breakability is nevertheless less present in the rural Norwegian probate inventories than studies have revealed was the case in other countries.

5.3 Social and economic consequences

Most of the commodities spreading in the pre-industrial period were not new, but had previously been found primarily in the wealthiest households, and in urban areas. That such goods began to spread amongst more ordinary households in the rural population which shows that they were not only considered attractive, but also obtainable for a wider share of the population than before. Thus rural households may have emulated urban or local elites, but there were also other motivations behind households changing and increasing their consumption. As in more economically leading countries the goods resulted in significant improvements to people’s daily lives and had economic and social consequences.

The durable and semi durable goods spreading in the rural population implied practical improvements which increased efficiency and improved living standards. The gradual localization of more of the household’s functions under one roof is an example of one such trend, as it saved time previously spent moving between buildings. Another is the improved indoor lighting from windows and artificial light sources which enabled members of the household to work in the dark of winter and into the night, thus lengthening the workday.

Several of the goods, such as ovens, tiles, beds and bedding improved health conditions by providing warmer, less humid and drafty living conditions. This benefitted not only the nuclear family, but also other members of the household who worked or otherwise spent time inside. W.G. Hoskins speculated that it was these changes which in England were responsible, at least in part, for the marked (even remarkable) increase of population during the second half of the sixteenth century, and above all perhaps in the last quarter of the century.

Claiming the same for Norway would be similarly speculative, but it is difficult to ignore the fact that the doubling of the Norwegian population taking place in the long 18th century coincided with the diffusion of durable and semi durable goods which improved living standards.

Social consequences of goods took form as opportunities for increased individuality and privacy, but they also created social divergence. A person’s identity had in the past been linked to the family, clan, employer or similar groups, but as part of the Age of Enlightenment attention was shifted towards the individual. The increased availability of goods made it possible for people to show their individuality through the items they surrounded themselves with.\footnote{Porter, R.: 2001, p. 383-385.} A good example is clocks and books which signaled interests in enlightened ideals like accuracy and knowledge. Similarly tiles and cast iron ovens signaled that the owner was concerned with being thrifty and rational, as well as interested in housing structures which increased efficiency. But such items may also have been owned for show or to signal status or wealth; clocks did not always work, the books were not necessarily read, and glazed tiles in different colors shining brightly in the sun for the whole community to see would not have been considered a drawback for those who put weight on appearances. Through the ownership of such things the social distinction became visible.

Linked to the focus on the individual was the increase in privacy.\footnote{Weatherill, L.: in Brewer, J and R. Porter (Eds.): 2006.} Larger houses enabled people to withdraw away from others members of the household. Similarly items like plates emphasized personal space, and also beds, often with drapes, provided household members some privacy. But for whom was this privacy? The spread of specialized rooms, such as kitchens and bedrooms for work or intimacy, also lead to increased physical separation between the formal and informal, between genders and between the nuclear family and other groups in the household. When food preparation began occurring in a different room from the main room where many household decisions would have been made, women and servants were slowly excluded not only from these spaces but also from partaking in, or being privy to, the decisions being made.

Many of the commodities also facilitated social and cultural changes. Clocks were an example of this. Even though activities in the preindustrial society were measured by the day, week or month, and before or after a meal, sunrise, midday or sunset, clocks gradually came to impact on rural societies. The spread of clocks broke part of this tradition, and affected
more people than just the owner. By tolling a larger bell (often set on the stabbur or on top of the main house) they signaled the time, and the workers (and everyone else within earshot) were informed of the start or end of the working day.\textsuperscript{448} Chiming every hour, clocks also ensured that the household was woken in the morning, thus making it possible to get more out of the day. The increased precision made it possible for farmers to insist that work started and ended at a certain time, and pay could be cut for those arriving late. In this way the clock had a disciplining effect, not only on the owner, but also on those of his household and community. Similarly windows enabled the farmer to observe and supervise workers without having to go outside.

The spread of goods also lead to increased \textit{social divergence}; between those who had, and those who did not. Plates illustrate this well; when households ate from a communal bowl all had the same dish. Once individual plates became common it was possible to serve different food depending on status in the household. Plates also allowed the housewife increased control of food consumption as it became easier to regulate portion sizes to different members of the household. Similarly more living space also enabled the nuclear family to withdraw to separate rooms from the remaining household for dining or in the evenings. This increased the feeling of privacy for the wealthy, but also a division between formal and informal relations within the household. Eilert Sundt wrote in 1851 that dining was still common in the more isolated mountainous communities, but that in the market oriented agricultural communities in Romerike (inland eastern Norway) it was only the oldest cotters who remembered that the servants and the farmer’s family ate together on the wealthiest and most influential farms. The change had taken place in the preceding 50 years. The same older generation also remembered how the farmer used to toil next to them in the field, but that now he, and sometimes even his sons, instead supervised \textit{walking the field with a pipe in his mouth}. Even if it was only the wealthiest farmers who could do this, Sundt noted that many younger people in this region had begun to accept this social division as the norm.\textsuperscript{449}

\textsuperscript{449} Sundt, E.: \textit{Om sædelighedens tilstand, bd.3}, 1866, Chap. 8, §93.
5.4 Conclusion

There are no indications that a “consumer revolution”, in Neil McKendrick’s understanding of the phenomenon, occurred in pre-industrial Norway. Instead the trends toward more comfortable and “breakable” durable and semi durable consumer goods found in the financially leading countries of Europe are also found in rural areas of Norway. The speed of the diffusion of the trends was influenced by geography, but most importantly, in the extent by which communities were integrated with the market. Those first to pick up new trends were communities which were located on trade routes or deeply engaged in the export trades, or the domestic market for grain in particular. Closeness to urban areas ensured that in many cases, as in Eiker or Spydeberg, trends spread quickly. However, as in the case of Austrheim, this was not always so. Again it was the communities’ success in the market which determined the spread of the trends.

An important consequence of the spread of durable and semi durable goods was that people and households became familiar with the goods, and got used to the idea that they too could acquire them. Knowing that goods existed which could improve their comfort was a motivation for acquiring them. But equally important was the fact that the goods were available at prices which more households could afford. In part, this meant that households made the goods themselves. But as more specialized producers became active in rural areas making goods for lower prices, it became increasingly possible to acquire the goods from the market. This resulted in households becoming used to the comforts of these new goods, desirous for more of them, and aware that attaining such goods was now within their reach.
Chapter 6: Bites, nibbles, sips and puffs – new foodstuffs in rural Norway

That slow but significant changes in the material culture of Norwegian households took place in the pre-industrial period is visible in several ways. One example was in housing and furnishings, which was discussed in the previous chapter. Another, which is the focus in this chapter, was in changes of diet, a subject which, until now, has been afforded little attention by Norwegian historians. Another example which while deserving of thorough study has had to be left out here, is changes in dress and the increased use of imported textiles which several studies indicate took place. 

European diets in the 18th and early 19th centuries were characterised by significant changes. In Norway, especially in rural areas, this is seen in the shift from protein rich foods like dairy, fish and meat and in most cases self grown coarser grains, to an emphasis on more carbohydrates from grains such as rye and wheat, as well as potatoes; increasingly purchased from the market. There was also an increase in supplies of new exotic goods such as spirits, tobacco, sugar, coffee and tea. Historic diets are a challenging subject to research since the goods were, so to speak, eaten up. Probate inventories offer little information as food stores were rarely noted. Historic recipes can provide some indications of consumption, but these tend to reflect the upper strata’s consumption or food for special occasions. Far less is known about what the majority of the people ate on an everyday basis. This chapter seeks to understand how changes in the diets of rural Norwegians took shape, and what impact this had on society. The concepts of “comfort” and “breakability” also lie in the background of the discussions in this chapter, as does the question of what role market participation played in the spread of the new foods.


This chapter relies largely on customs records and contemporary descriptions of rural people’s diets to help grasp the changes taking place, since few physical traces remain. It focuses first on the shift to more carbohydrates like grain, and then on the spread of exotic goods in Norway. The last section looks closer at the circumstances in which the new foodstuffs were consumed in order to understand how they helped create consumer aspirations motivating increased consumption and market participation.

6.1 From proteins to carbohydrates

European diets of the early modern period appear to have been, at least to modern eyes, rather monotonous. Environmental factors dictated a population’s meals and access to food, thus Northern Europeans had a more protein rich diet than those in the south. For most households, carbohydrates made up at least 60 percent of the diet, supplemented by eggs and dairy products like cheese and butter for protein. Salted, smoked or dried meat and fish was reserved for special occasions. A marked change nevertheless occurred in the choice of grains and drinks, as well as in the customs surrounding dining.

Two overlapping pre-industrial diets can be identified in Norway; the urban and the rural, each of which was influential on the other. As international trade developed the urban diet became more like that of other Northern European cities. Depending on wealth and social group, the urban diet tended to be more varied, comprising foreign dishes or foodstuffs such as rice pudding and lemons, as well as more prepared meat.

The rural diet was more traditional and in a sense more “primitive”; the raw materials were few and simple, preparation was fast and undemanding, and the utensils, as discussed in the previous chapter, were few and rather basic. The accessibility of finer foods and ingredients was also more restricted than for households in urban areas. In rural areas there were generally four to five meals a day during the summer when there was much work and long


days, and only three during the quieter winter days. Dairy and grain in the form of porridge or bread with cheese were the predominant everyday foods, and meat was generally reserved for special occasions. In coastal areas fish was an important source of protein, whilst in inland areas where husbandry was widespread, meat was somewhat more prevalent. Freshwater fishing, venison, chickens and eggs also supplied extra nourishment. The wealthier the household, the more meat was served; the poorer the household the more dairy and grains.  

It is likely that poorer urban households consumed similar meals to households in rural areas, and it is plausible that the everyday meals of richer households were also similar to their rural cousins. Eilert Sundt noted that the main difference between the diets of the rich and poor, such as he experienced it, was that "in my circle one knows the importance of food, but will most often imagine one has so many more important things to think of and enjoy that the butter and bread appears less important and noble; whilst, amongst poor folks it seems that it is precisely the butter and bread which is foremost in their minds." Thus the main difference was the amount of food available.

Depending on the season, climatic conditions and the possibility of famine, households were required to prepare food so it could last for a long time. Fresh food was therefore uncommon; meat and fish were instead salted, dried or smoked. Even milk was rarely served fresh; instead it was made into sour milk, butter or cheese in the summer when the animals grazed in the mountains (sætring). Bread was predominantly based on sour dough using oats, barley and rye, or thin wafer crispbread, "flatbrød", made of oats or barley and baked on a stone or cast iron griddle (takke). It could last for several decades. The preserving processes made most food taste salty, sour, smoked or brine cured (speket). Vegetables were rare, and only cabbage, onions, peas, and yellow turnip/swede were eaten. Some communities, most notably those close to urban areas or with progressive officials, had herbs and vegetable gardens.

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455 "I den kreds, hvor jeg hører hjemme, der veed man jo nok også, hvad mad har at betyde; men for det meste har man eller indbilder man sig at have så mange højere ting at tænke på og glæde sig ved og sørge for, at smørret og brodet ved siden deraf synes som en mindre vigtig og ædel sag; blandt fattigfolk derimod ser det ofte ud, som om netop smørret og brodet står i første rummet." Sundt, E.:1857, Chap. 8.
There orchards also began spreading in the last half of the 18th century. Despite being known from the mid 18th century, potatoes experienced little popularity until the famine during the Napoleonic war years. As noted in Chapter 2, it played only a small role in the population growth of the period. It was, however, an attractive crop for households with small plots seeking substitutes for bread since the yield was high, even if the calorific value was low. It may also have played a nutritional role because of its high C-vitamin content as the rural Norwegian diet in general appears to have lacked in this.

But a diet is never stagnant, even if the speed of change may be slower in rural areas. Oats and barley were best suited for porridge and “flatbrot”, but the increased domestic cultivation, as well as imports, of rye and to a small degree also wheat enabled new forms of yeasted bread and cakes. Baking ovens, which enabled the baking of yeasted bread had been in use on the King’s farms from the 1300’s, but only in late 17th and early 18th century did they become part of the rural people’s houses, starting in southern Norway. The spread of baking ovens in this region has been linked to the changes in the vernacular housing discussed in the previous capter in which food preparation was moved from a separate brew house into the main house. The knowledge of the ovens is thought to have been had been brought to Norway through contact with the Dutch. Baking ovens were also in use in urban settlements where the market economy was better established. Baking ovens spread slowly to other parts of Norway where they were sometimes shared by several farms. In rural areas guesthouse keepers and rural shopkeepers were known to build baking ovens and sell fresh bakeries as

458 100 grams of potato provides only 90 kcal, while grain gives 300 kcal. However, the same sized land produces 5 times more potatoes than grain. Thus, potatoes were more practical and beneficial for those with plots too small to produce sufficient grain to either earn a profit, or supply the household’s needs. Roche, D.: 2000, p. 243.
460 Estimates indicate an increase from 2510 barrels of wheat and rye (0,9%) in 1723 to 16299 in 1835 (3,9%) of the grain sowed. Wheat’s share of the imports rose from 1,3% 1700-25 and rye from 17,8% to respectively 1,6% and 28,5 in 1775-84. Hovland, E.: HT, 1978.; Herstad, J.: 2000, p. 199. (see chapter 2 on grain production)
part of their selection of goods. Sold in this way they functioned as an early form of “fast food”, and those purchasing them engaged in the spreading market economy.

New dishes and food stuffs also gradually spread within rural areas. Examples of such were soups, especially those made from meat, and rice made into porridge, both of which were eaten on special occasions. Customs records also mention foodstuffs like polenta, dried apples, different varieties of nuts, fresh lemons and spices such as cinnamon, pepper and anise. Over time the volume of such goods increased. These were first available in towns, but then spread to rural areas through the opening of trade and the spread of new retail forms discussed in chapter 3. Eilert Sundt reported from the mid-19th century that in many places “vassgrauten” (porridge made using water, not milk) which had been the common morning meal was being exchanged with coffee (coffee will be discussed further on). He also noted that coffee had impacted upon milk consumption as the increased use of sweet milk in coffee had resulted in making sweet milk a more common everyday drink, thus replacing the old sour milk.

Little is known about water as a drink during this period. In contemporary descriptions it was never mentioned at meals or in social occasions. Studies of diet and health made in the 19th and 20th centuries indicate that the quality of water in many places was low. Instead variations of whey (myse/syre) were the usual accompaniment to food, and a bucket of it was always available in a house. Ale (ca 5 percent alcohol) was served on special occasions. Both drinks were usually made by the household itself. As in the rest of Europe in the long 18th century strong alcoholic beverages also spread to rural Norway. Picture 6.1 shows an example of a farmer from Hedemark drinking spirits. The German and Danish grain based spirits like

References

464 Sundt, E.: Om Sædeligheds-Tilstanden, 1854, chapter. 8.
465 Whey (Myse/ syre) is the liquid remaining when making cheese.
brandy were the cheapest, and French and southern European alcohols like wine, brandy and Madeira were more expensive. The latter were restricted to the wealthier parts of the rural and urban communities.467

**Picture 6.1: Farmer from Hedemarken drinking spirits.**


Domestic production (in Denmark) of grain spirits also grew in the 18th century, further increasing its availability. Figure 6.1 shows that the relative price of Danish brandy to deals of timber and fish declined. Danish prices are not ideal to use, but in lieu of a Norwegian price series, they are the best available. The price decline was largest relative to timber, and appears

to have been most marked from the 1770s, while for fish it declined in the 1760s and remained stable.

Figure 6.1 Prices of Danish brandy relative to deals of timber, stockfish and bergfish (Danish prices).

Hans Strøm in Sunnmøre noted that communities close to urban areas, or located on trade routes, were the first to pick up the new beverages. He estimated that the population in Sunnmøre spent twice as much on spirits as they paid in taxes, and that the ban on public drunkenness has had little effect on consumption. In less market integrated places, like Setesdal and Trysil in the 1780’s, spirits were not yet commonly consumed in the last decades of the 18th century. Nevertheless, social problems caused by alcohol, such as households wasting money on drink, were frequently mentioned in the topographic descriptions, as well as being emphasized in the contemporary literature of both the 18th and 19th centuries.

The spread of spirits also lead to a new form of socializing. Away from home, sawmill workers and carters in Eiker bought alcohol in guesthouses along their way since they rarely managed to come home for meals. A study of a rural shopkeeper in Elverum between 1820 and 1846 shows that spirits were the most sold goods, constituting 23 percent of the total sales. Towards the mid 19th century the consumption of spirits slowly began declining. They became replaced by weaker alcoholic drinks such as beers like Bayer (3-3,5 percent), but also, as Sundt noted, by strong coffee.

Calories and manners

Estimating the calorie values of past diets is challenging since it is difficult to know precisely how much, and what people in different social groups ate and drank. Norwegian preindustrial calorie estimates (see table 6.1) have been based on contemporary statistics of grain yields and imports, as well as on animal yields. However the statistics under-represent productivity in the 18th century and the early decades of the 19th. It is furthermore problematic that calories from fish, hunting, gathering, alcohol, and imports such as sugar, are not included. The first two being important sources of energy in the protein rich early modern diet, the latter increasing in significance throughout the period. As such the estimates are far too low, especially the earliest ones where it can be assumed that proteins played a much more important role.

They nevertheless provide an impression of a gradual increase in per capita calorie consumption in the Norwegian diet from 2000 - 2200 kcal in 1723, to 2600-2800 in 1809, and 3225 in 1855. The increase correlates with improvements in the agricultural productivity at

473 SSB: *Medisinalberetning*, 1858, Oppland.
474 The historian Kåre Lunden has also calculated per capita calorie consumption using the same source material, but weighing the data differently by assuming that animal proteins constituted only 30% in 1723, and between 13 and 16% in the other years. His results indicate a kcal consumption of 1425 in 1723, 1887 for a normalised year prior to 1809, 2252 in 1835 and 3222 in 1855. Since a human requires at least 2000 kcal a day, Edgar Hovland has argued that Lunden’s estimates are too low, partly because the source material systematically under-registered essential data, partly because he disagrees with the development of productivity which Lunden drew up, and partly because he argues that the calculations are flawed. Lunden, K.: 1975. Hovland, E.: 1978.
the time (discussed in chapter 2) and coincides with the shift towards more carbohydrates in the form of grain and potatoes.

Table 6.1: Kcal per capita per day, absolute and relative numbers, sorted according to origin.

<table>
<thead>
<tr>
<th></th>
<th>1723</th>
<th>Normalised year before 1809</th>
<th>1855</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kcal</td>
<td>Share</td>
<td>Kcal</td>
<td>Share</td>
</tr>
<tr>
<td></td>
<td>Agriculture</td>
<td>831-1016</td>
<td>1216-1459</td>
</tr>
<tr>
<td>Kcal</td>
<td></td>
<td>Animals 528</td>
<td>667</td>
</tr>
<tr>
<td>Kcal</td>
<td>Share</td>
<td>Grain imports 648</td>
<td>731</td>
</tr>
<tr>
<td>Kcal</td>
<td>Share</td>
<td>Total 2007-2192</td>
<td>2614-2857</td>
</tr>
</tbody>
</table>


Since calorie estimates are per capita, and do not distinguish between regions, it is not possible to identify how the regional diets impacted on the population. Given the emphasis on dairy proteins in the inland diet one could expect that this would nurture taller people, than those living of diets with more fish and grain. Lacking an overall study of heights in early modern Norway, a very brief study of available military records confirms that recruits in costal areas were on average 1.3 cm shorter than those from inland communities. The records also indicate a decline of four to six centimetres in the average height in the last decades of the 18th century and in the early 19th century, coinciding with more carbohydrate rich diets.476

The data selection is small, and there are severe problems linked to representativity and reliability connected to using them. Also, a likely explanation for the declining heights is the increased recruitment to the armed forces in the first decade of the 19th century due to the danger of war led to the recruitment of less healthy, and thus often shorter persons. As such,

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these heights can only suggest consequences and change, and will hopefully stimulate further studies.

Comparisons with historic calorie consumption in other countries are difficult since important food items are not included in the Norwegian study. To place the Norwegian estimates within a wider context, it is nonetheless interesting to note that French estimates indicate that soldiers in 1771 received rations totalling 3000 to 4000 kcal, of which part went to feed the soldier’s family. Even though the amount of calories consumed rose in the rural Norwegian population in the preindustrial period, the manners connected to the meals appear to have remained relatively unchanged, at least in rural areas of Norway. Contemporary elites frequently complained of dirty tables, unwashed plates which were stuck in a gap in the wall awaiting the next meal, food which had been stored for so long that it had a thick, black layer of dust and grime, or porridge with so much grit that it looked as if it had pig bristles.

The primitive, unhygienic conditions and lack of refinement in both how the meals were prepared and eaten, as well as their taste and complexity has been explained by Fredrik Grøn who states that this was because the women were busy with other work. Grøn does have a point. Running a household was much work, so was participation in pluriactives such as tending animals, spinning, weaving or taking over the men’s work when they were away in the export sectors or other activities. This fits well with Eilert Sundt’s defence of what contemporary elites judged to be disgraceful housekeeping. He argued that it was unfair to judge rural people according to the standards of hotels or houses accustomed to frequent

visitors. In light of the poverty in which many people lived, most households were as clean and tidy as they were able to make them within the limits of their resources.481

6.2 The spread of exotic goods

In the wake of the colonial expansions in the early modern period new goods spread, often at high speed, across Europe. Amongst these were tea, coffee, chocolate, sugar and tobacco which fast became the world’s first mass traded intercontinental goods. Tobacco was brought to Europe by the Spanish from South America, and by the mid 17th century it was so widespread that many monarchs attempted to ban it, amongst other the Danish-Norwegian kings. The Spanish also brought back chocolate which became the chief exotic drink in Spain and Portugal. Tea was imported from China, and became enormously popular, especially in England. Coffee and sugar originally came from the Arabian Peninsula and had enjoyed popularity as expensive luxuries in Europe. By seizing control of the exotic goods production and through the use of slave plantations, the Europeans in the long 18th century were able to ensure large quantities at low prices, enabling the goods to enter the European market as mass-commodities available to increasingly larger sectors of the population.482 As such they fit the term “breakable goods” used in the previous chapter. Denmark-Norway was also actively engaged in this trade, and had trading companies travelling both to China, as well as the East and West Indies. It also smuggled, or helped smuggle, exotic goods to other European countries. 483 Unlike several European states who tried to ban the goods, Denmark-Norway, changed their tactics when it became clear that taxing the goods would ensure large

481 Sundt, E.: Om renligheds-stelet i Norge, 1869, Chap. 9.
Thus, the spread of tobacco, sugar, coffee, tea and chocolate had heavy economic interests pushing for their success.

Even if exotic goods were first noted in Norway in the early 16th and 17th century, the amounts were so small and the prices so high that they were limited to all but the very wealthy. Tobacco was the first of these exotic goods to come into widespread use. A ban on tobacco imports to Norway which was imposed in 1632 indicates that it was already in use. But this was lifted in 1643 to be replaced by high customs duties. A recent find of 1100 English chalk pipes dated to 1624 at what was formerly the merchant pier in Oslo shows that smoking must have been known; at least in urban areas. But the sheer number of pipes, sufficient to supply half the male population of the town, indicates that the market was not just in Christiania. Tobacco was also known in the inland during the 17th century, as confirmed by an exchange of letters between two parsons in Lesja and Fron (inland Eastern Norway) who complained of their congregation using snuff during the Sunday sermons. From Northern Norway, Petter Dass commented in 1683 that the nostrils of wives in Northern Norway were delightfully black from tobacco (likely dry snuff). Sugar and sugared sweets were already noted in the 16th century, but only amongst the wealthier households. Coffee, chocolate and tea are found in 17th century customs records, but the volumes are small and the importers wealthy, so they were clearly of limited spread.

Exotic goods became increasingly common in Norway in the 18th century. A frequently used indicator of the availability of goods is per capita estimates. The estimates of per capita availability of exotic goods in table 6.2, 6.3, and 6.4 are based on a combination of customs

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485 For. 29.1632 Om forbud på Tubaks Indførsel i Norge (A ban on tobacco was never implemented for Denmark), in FOAa
sources. Unfortunately the compiled imports and exports records for Norway have not survived, and as noted in the previous chapter lacunae and differences in making the books render it difficult, if not impossible, to reconstruct the national data. For this reason the estimates are partly based on contemporary surveys of specific goods on a national level, and partly on compilations of the customs records for Christiania and Drammen, the two largest ports in Akershus stift, as well as Trondheim for the years 1780, 1785, 1790 and 1795. Unfortunately the years of the national surveys and the customs records do not overlap, making it difficult Akershus and Trondheim stifts share of imports. However as more than 65% of the Norwegian population lived in Akershus and Trondheim stift in this period, the estimates enable the identification of some overall trends for Norway. It is unfortunate that the customs records for Bergen, the largest Norwegian port, were non-compatible with the other regions’ records, however, there is nothing to indicate that the situation of exotic goods consumption in Bergen stift differed much from Akershus and Trondheim stift. Smaller ports have been left out as most of these did not have rights to trade in such goods, and also because their customs records have only patchily survived. Quantitative estimates for tea and chocolate have been left out as the amounts arriving were miniscule.

It should be noted that there is no reason to believe that what was noted in the customs records was all that arrived. Norway has the longest coast in Europe, and there was no way that customs officials were able to patrol it thoroughly for smuggling. Corrupt customs officials may even have facilitated some of the smuggling. Therefore the estimates only suggest what arrived legally, and should be understood as being considerably lower than what was actually available.

6.2.1 Sugar and chocolate

The trend in the per capita estimates of exotic goods indicates fluctuation with a gradual increase. Looking closer firstly at sugar (see table 6.2), a fluctuating but overall increasing trend is discernable from the 1740’s to 1795. The growth in the 18th century is explained by

490 66% in 1769 and 67% in 1801.
491 Only imports were noted. Goods arriving from domestic ports such as Copenhagen or Christiania were not.
the increased availability of sugar after the Danish-Norwegian state purchased the sugar producing islands St. Croix, St. Thomas and St. John in the Caribbean in the first half of the 18th century and incorporated them into the Danish-Norwegian customs union; protecting this sugar production from imports.\(^{493}\) As such, virtually all sugar arriving in Norway in the last half of the 18th century was from the Danish-Norwegian colonies, usually via Copenhagen.\(^{494}\) Converted into kcal the 1.3 kg per capita sugar in 1780 would have provided 4000 kcal annually, which, assuming a calorie requirement of 2700 kcal a day (the mean kcal of the 1809 estimate in table 6.1), would make up 0.4 percent. The war and post war years were marked by declining per capita sugar consumption, before increasing again as world trade liberalized.

Table 6.2: Per capita estimates in kilos of sugar, 1740-1846. National and Akershus and Trondheim stift.

<table>
<thead>
<tr>
<th>Kg per capita</th>
<th>1740</th>
<th>1750</th>
<th>1780</th>
<th>(1811)</th>
<th>1819</th>
<th>1829**</th>
<th>1835**</th>
<th>1845-6***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar</td>
<td>0.06</td>
<td>0.37</td>
<td>1.32</td>
<td>0.49</td>
<td>0.24</td>
<td>1.07</td>
<td>0.2</td>
<td>0.99</td>
</tr>
</tbody>
</table>

N= national estimates
A & T: estimates only for Akershus (Christiania and Drammen ports) and Trondheim stift.

\(^{(1)}\) During the war. These estimates are based only on imports, not on goods arriving from domestic ports, but at least help provide an impression. Rigsarkivet, Copenhagen, Generaltoldkammeret, toldkammerkanceli og sekretariat, 1809-1829 forklaring over ind- og udførte varer fra til fremmede steder.

* Riksarkivet, Oslo, Rentekammeret og generaltollkammeret, 136 Beregning over tollinteradensbeløp sonnafjeldske tollkontor, 1707-85, hylle: 4a10222.;

** Riksarkivet, Oslo, Generaltollkammeret, tollregnskap 1780 - 1795, Christiania, Drammen and Trondheim.


\(^{494}\) RA, Oslo, Generaltollkammeret, tollregnskap 1785- 1795, Kristiania, Trondheim.; Rigsarkivet, Copenhagen, Rentekammeret og generaltollkammeret, 136 Beregning over tollinteradensbeløp sonnafjeldske tollkontor, 1707-85, shelf 4a10222.
Figure 6.1 is based on Danish prices, but lacking Norwegian price series, it can be used to indicate general trends. Sugar prices relative to prices of deals (boards/planks) of timber and fish, key produce in Norway, shown in figure 6.1, were stable or declining. Reflecting the economic conditions discussed in chapter 2, the decline was most significant for deals of timber, and more stable for fish. Combined with the increased availability, sugar’s “breakability” increased. The relative price trends for sugar and Norwegian produce differs from Klas Rønnback’s Danish study in which sugar prices relative to grain and butter, both important produce in Denmark, declined after the mid 18th century following the accession of the sugar isles, and then rose from the 1770s.495 The divergence indicates how different real prices in the two countries could be, despite being in the same political and economic union.

Figure 6.2: Relative price of sugar to deals of timber, clip fish and bergfish 1750-1800 (Danish prices).

The fluctuations in sugar supplies found in table 6.2 in the last decades of the 18th century are explained by disruptions such as bad harvests and cargo ships lost to hurricanes. But the Haiti slave rebellion in the 1790s was also likely to have had an impact. After 1814, and in the post-

war years, per capita sugar availability stagnated and declined as a result of the loss of the sugar isles, protectionism and decline in world trade. From the 1830s per capita availability gradually rose again and prices declined as liberalization opened for new producers to access European, and also Norwegian markets. Reduced tariffs and increased competition further helped lower the price.

Finding qualitative sources on the spread of sugar has proven challenging. A major reason is that, unlike other exotic goods, sugar stirred up little controversy. In part, this was because it was an alternative to existing sweeteners such as honey. But it was also more politically and patriotically acceptable since it was domestically produced and manufactured. It is nonetheless puzzling that sugar was not mentioned in the answers to the 1743 survey (see chapter 1.6), and is only found in a few recipes for berry juice in the topographic literature which is otherwise often quite detailed about meals.\textsuperscript{496} Christoffer Hammer’s manuscript from 1793 for the first Norwegian cook book (which also included “foreign” dishes) does mention sugar, but only in a few recipes\textsuperscript{497}. This could be understood to mean that it was rare in the early modern Norwegian diet.

But other sources draw a different picture and indicate that sugar was a well known commodity in rural areas, even if it was not used on a daily basis. The trading books of the Bergen merchant J.E. Mowinkels show that sugar, usually lower quality syrup, was frequently part of farmers’ purchases.\textsuperscript{498} Christian Pram noted on his travels through Hedemarken in 1804 that the locals consumed sugar;\textsuperscript{499} Four advertisements for both Danish and Norwegian refined sugar was found in the first twelve issues of the \textit{Norske Inteligenssedler} (from May 1763); some merchants selling only large quantities, others only small; clearly catering for

\textsuperscript{497} Recipes such as bigat: “a ragout of cow muzzle and feet in a sweet soup of sugar or syrup, currants and bits of apple” and strawberry soup “made of strawberries boiled in water, sieved through a cloth, mixed with some flour, sugar, wine and cinnamon. Eaten with diced rye or wheat bread which has been fried in butter” Hammer, C.: \textit{Norsk Koge-Bog sammenskrevet efter Danske, Svenske, Tyske, Franske, Engelske, og Italienske Koge-Boger}, unpublished manuscript 1793, published Landbruksforlaget, Oslo, 1994.; Hammer, C.: Hadeland,\textit{TH}, hefte 22, 1798.
\textsuperscript{498} SA, Bergen, Privatarkiv, Movinkel, (Ms 814 B 18 og 19, UBB). I am grateful to Stein Tveite for letting me use his notes of these items and prices.
\textsuperscript{499} RA, Oslo, Pram, C.: \textit{Inberetning til det Kongelige General land Oeconomie og Commerce Collegium, Kommercielkollegiet, Produksjons- og fiskerifags sekretariat, Chr. Prams innberetninger, nr. 1322.}
different customers. As the retail system developed (often connected to guesthouses), sugar was also for sale at these. An example is the rural trader in Vårfluse (coastal Trøndelag) whose trade privileges included the sale of syrup to the locals. In the study of the Elverum rural trader between 1820-46 it made up ca. 4 percent of the sales. Sugar could also be served at guesthouses, such as the one in Merdø (southern coast) where the good food was liberally sprinkled with sugar. It was more likely to have been used in urban areas as it is noted in the weekly menu of the Trondhjemske vaisesenhus (orphanage) which served bread with syrup (stommbrod med sirup) and beer soup with syrup (ølsuppe med sirup). These were common dishes.

It is therefore no surprise that the otherwise protectionist author of “Den lille Tariff” in 1820 declared: Sugar, its use having become so common, should be placed among those things we cannot live without, not deny our pampered palates such a comfortable spice. In early 19th century cook books, sugar was an often recommended additive for people, such as farmers, who had strenuous work. An example of such was “flesksoll”: bacon fried till the fat seeps out, after which water, bread, butter and a lot of sugar was added.

Chocolate was rare in Norway in the decades around the beginning of the 19th century, but it appears nevertheless to have been known even if actually eating it was rare. The poem mentioned later (see footnote 515) shows it could be part of wealthy women’s morning rituals. This is confirmed by finds of expensive utensils such as chocolate cups and bowls amongst the wealthier parts of local communities. The fourteen porcelain chocolate cups and one porcelain chocolate bowl noted in one of the most wealthy inventories in Herøy exemplifies this. Information about the availability of chocolate was spread through newspaper advertisements. One such advertisement was placed by Thomas Roed in

500 Norske intelligensseldred, nr.1-12/1763.
504 Sukker, hvis Brug er bleven saa almidenlig, faaer vel sættes blant de uundværlige Sager, for at ikke at negte vor forvændte Gane ett saa behagelig Krydderi”. Den lille tariff, 1820.
507 Probate inventory: 31.3.1788 Margrethe Rønneberg, Krigsholmen, Ålesund.
Christiania in January 1770 who appears to have specialized in sweets freshly arrived Catherine plums, assorted chocolates, Brunelles, assorted figs and raisins, pickled ginger, Pommeranzer… sugared almonds, and long-sugar, scented waters, walnuts… syrup.\textsuperscript{508} Specialist chocolate producers\textsuperscript{509} were also operating in Trondheim and Bergen.\textsuperscript{510} Studies of the customs lists also show that most of the chocolates imported were “assorted chocolates” (confect); that is small pieces of chocolate often filled with sugar or alcohol. In wealthier households sweets like this probably accompanied coffee and tea.

6.2.2 Coffee and tea

The per capita estimates of coffee in table 6.3 are so small for the 18\textsuperscript{th} century and the first decades of the 19\textsuperscript{th} century that it cannot have been a very common drink. The Danish-Norwegian West-Indian isles had little coffee production\textsuperscript{511}, but in wartime other countries would ship their coffee supplies via the Danish isles and Copenhagen.\textsuperscript{512} Unfortunately no price series are available for coffee or tea for either Norway or Denmark, but studies of international coffee prices indicate great fluctuations caused by political and climatic occurrences throughout the 18\textsuperscript{th} century.\textsuperscript{513}

In 18\textsuperscript{th} century Norway coffee and tea were mainly confined to urban places. It was primarily consumed among people who had travelled abroad, the urban upper classes, but to some extent also among the wealthier rural population. Letters written in 1700 from the coastal settlement Arendal (Southern coast of Norway) mentioned coffee served after dinner among the town’s wealthy people.\textsuperscript{514} In 1755 Madam Ø. wrote that coffee was served amongst the

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{508} "hio Thomas roed er at bekomme friske nye hiemkomne Cathrine Plommer, confecteurer, Bruneller, Confectur-Fiifen og confect-Rosiner, syltet Ingefær og Pommeranzer,… sukker-mandler og Langsukker,… lugtevann, valnødder, …, sirup."	extsuperscript{\textsuperscript{\footnotesize{Norske Inteligenz-Sedler, nr. 2/1770.}}}
\item \textsuperscript{509} In the Chamber of Commerce’ records the production was termed “sjokolade og lac”. The first means chocolate, but the latter is more unclear. “Lac” can mean varnish or sealing wax, however it can also have meant “lake”, as in “sukkerlake”, being melted sugar which is used in sugar candy. Both products require much heat to be produced, and thus both may been the product.
\item \textsuperscript{510} Næss, I. E.: \textit{Erichsens konditori I 150 år- En søt historie}, Synlig, Trondheim, 2005, p. 7.
\item \textsuperscript{511} In the early 1780’s 94% of the coffee to Norway arrived via Copenhagen, in the 1795 63% were imported, mostly from Amsterdam and possibly from the Dutch coffee plantations on Java. RA, Oslo, Generaltollkammeret, tollregnskap 1780 - 1795, Christiania, Drammen, Trondheim.
\item \textsuperscript{512} RA, Oslo, Generaltollkammeret, tollregnskap 1780 - 1795, Kristiania and Trondheim, Oslo.
\item \textsuperscript{513} Clearence-Smith, W.G. and S. Topic: 2003, p. 29-30.
\item \textsuperscript{514} Floystad, I.: 2007, p.123.
\end{enumerate}
\end{footnotesize}
Christiania elite, and Christian Pram reported the same from the rural, largely grain growing region Hedemarken in inland eastern Norway in 1804.\textsuperscript{515} A poem\textsuperscript{516} from 1769 firmly places the exotic drink amongst the morning rituals of bourgeois women, as do contemporary diaries and chronicles.\textsuperscript{517} Tea drinking appears to have been more restricted to social groups. The upper class Madam Ø., her husband and the captain of the boat she was travelling on from Copenhagen to Christiania drank tea daily when on board, but so did the crew. Both beverages seem, nevertheless, to have been of little popularity amongst people living in rural areas as they are only mentioned once each in the 172 replies to the 43 questions sent out by the government in 1742.\textsuperscript{518}

Table 6.3: Per capita estimates in kilos of coffee 1780-1846. National and Akershus and Trondheim stift.

<table>
<thead>
<tr>
<th>Kg per capita</th>
<th>1780**</th>
<th>1785</th>
<th>1790**</th>
<th>1795**</th>
<th>(1811)</th>
<th>1815</th>
<th>1829*</th>
<th>1835***</th>
<th>1845-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>0,21</td>
<td>0,27</td>
<td>0,16</td>
<td>0,35</td>
<td>0,07</td>
<td>0,5</td>
<td>0,7</td>
<td>0,9</td>
<td>2,5</td>
</tr>
</tbody>
</table>

N= national estimates

A & T: estimates only for Akershus (Christiania and Drammen ports) and Trondheim stift.

( ) During the war. These estimates are based only on imports, not on goods arriving from domestic ports, but at least help provide an impression. RA, Copenhagen, Generaltoldkammeret, toldkammerkancéli og sekretariat, 1809-1829 forklaring over ind- og udførte varer fra til fremmede steder.

** RA, Oslo, Generaltøllkammeret, tollregnskap 1780 - 1795, Christiania, Drammen and Trondheim.


\textsuperscript{515} RA, Oslo, Pram, C.: Inberetning til det Kongelige General land Oeconomie og Commerce Collegium, Kommercekollegiet, Produksjons- og fiskerifågets sekretariat, Chr. Prams inberetninger, nr. 1322.; Madam Ø.’s letters printed in Norske Inteligenssedler nr. 4-9/1763, Christiania.

\textsuperscript{516} “When she has dressed, she drinks tea, Coffee and chocolate, Until the clock is just eleven. Then the table and plates are set...” Original: ”Når hun er pyntet, drikkes te, kaffe og sjokolade, til klokken just er elleven så dekkes bord og fade”. Quoted in Notaker, H.: 2000, p. 120 and 233.


\textsuperscript{518} Coffee is mentiond in Gjerdum prestegjeld, Riksarkivaren: Norge 1743, bd. 1, 2003 p. 414.; Tea is mentioned in Øvre Romerike and Odalen sorenskriveri, Riksarkivaren: Norge i 1743, bd. 1, 2003 p. 402.
By 1783 this appears to have changed. A sumptuary law imposed in 1783 specifically banned Norwegian rural farmers from serving coffee at weddings, baptisms, funerals and similar events.\textsuperscript{519} The existence of a ban indicates there was a perceived coffee “problem”, or at least the start of one, in some rural communities. At about the same time a contemporary author noted that coffee was \textit{unfortunately} drunk in Christians amt (Oppland), one of the wealthy agricultural areas in inland Eastern Norway, not far from Christiania. The same was noted in Eiker parish, close to the port of Drammen, but there it was mainly drunk by those living in communities dominated by saw mills and the timber sector.\textsuperscript{520} In more isolated communities, such as Trysil, coffee was still not in use in 1784.\textsuperscript{521} The ban on selling coffee to rural areas was lifted in 1799. The same year the archives of the Christiania merchant Schiller reveal that wealthy farmers, also in neighboring valleys of Trysil, purchased coffee, and that travelling peddlers purchased large stocks of it to sell on their travels.\textsuperscript{522}

While coffee appears to have been a rare and luxurious commodity for most rural households in the 18\textsuperscript{th} century, it underwent a “boom” in popularity in the first half of the 19\textsuperscript{th} century. Much of this was enabled by coffee becoming more “breakable” due to liberalization of world trade and technological development in production. And trade increased availability and reduced its world market price.\textsuperscript{523} This explains how in 1820 the anonymous author of “Den lille Tariff” could write that \textit{Norwegians cannot live without this article [coffee], which supposedly is not made for his mouth, so let him keep it.}\textsuperscript{524} Similarly, it was reported in 1817 from Asker parish (close to Christiania) that \textit{if there is one luxury which he [the farmer] cannot do without, it is coffee. This drink has, unfortunately become too popular.}\textsuperscript{525} And between 1820 and 1846 coffee had become the third most sold item (11 percent of the sales) at the rural shop in Elverum in inland Eastern Norway.\textsuperscript{526} The two chicory factories noted in the factory survey in 1835 (see chapter 2.3.3) confirm the trend. Chicory was used as a coffee

\textsuperscript{519} For. 20.1.1783: Ang Overdaadigheds-Indskrænkning for Danmark, Norge og Hertugdømmene.; For.: Ang. Overdaadigheds Indskrænkning i Bondestanden i Danmark og Norge. In Schou, J.H.: \textit{Forordninger}.
\textsuperscript{522} RA, Oslo, Privatarkiv nr 87, Andreas Schiøller, hyllenr: 3b00515, dagbøker, Oslo.
\textsuperscript{524} “Caffebønner: kan Nordmanden ei undvære denne Artikkel, der vistnok ei eer skabt for hans Mund, da faaer han beholde den.” \textit{Den Lille Tariff}, 1820.
\textsuperscript{525} ”Er der nogen Luksusartikel, som han synes mer, end det burde sig, hengiven til, da er det : Caffe. Denne Drik har desværre! Taget stærkt Overhaand”. Neumann: ”Bidrag til statsisk-oekonomisk kundskab om Asker Præstegjield”, \textit{Budstikken}, nr. 67 & 68/ 1818.
surrogate\textsuperscript{527}, and its presence shows that the market for coffee was both established and large enough to support cheaper copies of the beans.

Coffee’s grip on the Norwegian population was virtually absolute by the 1860s. Even if there were still some exceptions, national medical reports note coffee was regularly consumed in most regions and by most social and age groups. In Østerdalen (inland Eastern/ mountainous Norway) children were fed \textit{only on potatoes, water soup, herring and coffee} and in Romsdalen it was drunk five times a day.\textsuperscript{528} In 1857 Eilert Sundt reported that at cotter places and on farms coffee had become a common drink for breakfast, and often also later meals, and that the workers on the larger farms had begun to demand the drink as well.\textsuperscript{529} As noted coffee influenced the consumption of milk, but it gradually also came to take the place of spirits, at least in some circumstances and groups.

Probate inventories, both in urban and rural areas, show that special utensils for exotic goods became more common as the 18\textsuperscript{th} and 19\textsuperscript{th} centuries progressed.\textsuperscript{530} Most of the utensils are found amongst the wealthier parts of the population, confirming the impression that they were primarily consumed by the elite. This trend is also found when looking at the spread of utensils for exotic drinks (tea, coffee, chocolate and sugar for sweetening) in the communities Herøy and Austrheim (see table 6.4). However, since both coffee and tea can be made and served in pots and bowls which were also used for other things, a lack of specific utensils in middling and poorer inventories does not mean that they did not consume these beverages.

\textsuperscript{527} Cichorie-Roden, \textit{dens Avl og Behandling til Cichorie-Kaffe}, Buch, Copenhagen, 1790.
\textsuperscript{528} SSB: \textit{Medicinalberetninger 1860 and 1858}.
\textsuperscript{529} Sundt, E.: \textit{Sædeligheds…}, 1857, Chap. 8.
Table 6.4: Share of inventories from Herøy and Austrheim /1770(77) to 1819) noting utensils for exotic drinks. Sorted according to 1800 price adjusted wealth groups.

<table>
<thead>
<tr>
<th>Herøy</th>
<th></th>
<th>Austrheim</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Share 1770-95</td>
<td>Share 1796-1819</td>
<td>Share 1770-95</td>
</tr>
<tr>
<td></td>
<td>less than 100 rdl</td>
<td>btw 101-200 rdl</td>
<td>more than 201 rdl</td>
</tr>
<tr>
<td></td>
<td>(70)</td>
<td>(59)</td>
<td>(43)</td>
</tr>
<tr>
<td>Utensils for exotic drinks</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

(The number in brackets show how many probate inventories in each group)

6.2.3 Tobacco

Tobacco is not a foodstuff as such, but it is often consumed together with, after or instead of food. Its distribution began earlier than the other exotic goods, and in the 18th century it was by far the most common of these. Unlike sugar and coffee which were in the process of spreading to rural Norwegian households in the second half of the 18th century, tobacco was already a well established commodity, also in communities and regions otherwise lagging far behind of general consumer trends. As such there is no diffusion to map, as tobacco was already being consumed. Large scale tobacco plantations and a well developed trade had made it available and affordable (even for rural Norwegian households) by the start of the 18th century, and probably even earlier in some regions.
Table 6.5: Per capita estimates in kilos of tobacco, 1666-1846. National and Akershus and Trondheim stift.

<table>
<thead>
<tr>
<th>Kg per capita</th>
<th>1666-68</th>
<th>1763-5</th>
<th>1780 **</th>
<th>1785 **</th>
<th>1790*</th>
<th>1795*</th>
<th>(1811) N</th>
<th>1819 ***N</th>
<th>1829* **N</th>
<th>1835* **N</th>
<th>1845-6 ***N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>0,25</td>
<td>1,16</td>
<td>0,6</td>
<td>0,7</td>
<td>0,7</td>
<td>0,4</td>
<td>0,6</td>
<td>0,7</td>
<td>0,7</td>
<td>0,7</td>
<td>1</td>
</tr>
</tbody>
</table>

N= national estimates.

A & T: estimates only for Akershus (Christiania and Drammen ports) and Trondheim stift.


( ) During the war. These estimates are based only on imports, not on goods arriving from domestic ports, but at least help provide an impression. Rigsarkivet, Copenhagen, Generaltoldkammeret, toldkammerkanceli og sekretariat, 1809-1829 forklaring over ind- og udførte varer fra til fremmede steder.

** Riksarkivet, Oslo, Generaltollkammeret, tollregnskap 1780 - 1795, Christiania, Drammen and Trondheim.


Quantitative estimates shown in table 6.5 show a rising trend in tobacco consumption between 1666 and 1846, the steepest rise occurring in the 1760s, when it topped at 1,6 kg per capita. Assuming a pipe contained 3 grams tobacco, this calculates into 533 pipes per Norwegian per year. After this there followed a period of stability and decline.\(^{531}\) This coincides with supply curve studies indicating that demand for a product is saturated and even declines as fewer start when its novelty is lost. New innovations are needed for the product to start a new growth. A similar curve has been identified for Britain, but taking place earlier. The time difference is probably best explained by tobacco being introduced earlier in Britain than in Norway. It is interesting to note that unlike the other exotic goods, tobacco experienced only a small per capita decline, to 0,6 kg, during the war years. In part, this is explained by tobacco being more accessible as it was grown in European countries like the Netherlands and Sweden. It also shows that tobacco was perceived as an essential commodity, even in wartime. Tobacco consumption continued rising again after the war as liberalization of world trade increased availability and reduced prices.\(^{532}\) Lacking price data both from Denmark and Norway for tobacco in the 18\(^{th}\) century it is difficult to say much about its development. The few prices

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\(^{531}\) At least 80% of the tobacco in the last decades of the 18\(^{th}\) century was imported through Amsterdam or other foreign ports. Source: RA, Oslo, Generaltollkammeret, tollregnskap 1780 - 1795, Kristiania and Trondheim, Oslo.

\(^{532}\) Braun Tvedte, M.: 1848, p. 381.
available indicate fluctuations between 45 and 25 skilling between 1720 and 1790, but with a somewhat declining trend. 533

The high per capita tobacco consumption is supported by a multitude of qualitative sources which show it was common in all parts of the country, and used by all social groups. In the replies to the 43 questions in 1743, 17 of the 172 officials reported widespread tobacco consumption. 534 The reports were often accompanied by worries that people would for example rather smoke and chew Dutch tobacco than, despite their poverty, have bread. If their money was spent on bread instead of tobacco, they would not suffer such poverty as many do. 535

Other contemporaries, such as Hans Strøm noted that: In Sunnmøre there are approximately 3260 male farmers, of which only approximately one third do not use tobacco. However a number of cotters, women and young men should be added, so the number of users is likely around 4000. 536 Similarly Hans Arenz reported from Sunnfjord that both genders smoked and chewed tobacco, in Hedemarken Lassen wrote that women also commonly smoked, chewed, and snuffed tobacco. From Toten it was reported that even children were avid smokers, Axel Smith in Trysil 537 emphasized unmarried men as those most tempted by the plant, and even the population in Setesdalen which in most ways still lived as they had during the middle ages, considered tobacco a necessity to be purchased together with grain, salt and peas. And the Sami population were also partial to tobacco, for their own consumption, but also to sacrifice to their spirits. 538

535 ”deres inclinasjon er … at røge og tygge hollandsk tobak, den de endog hvis fattig de ere, vil langt heller have end brød, og bleve de penge anvendt til brød som til tobak udgives, lidde de icke saa stor mangel for nødtørflig ophold som de nu mangengang lider.” Basso, H.: Rakkestad, TJ, hefte 17, 1796, p. 249.
537 Smith, A.: Trysil, TJ, hefte 23, 1797.
Tobacco tastes varied regionally in the 18th century; the South smoked English spun tobacco and chewed the fattier and succulent Dutch spun tobacco. In Northern and Western regions unprocessed English leaf tobacco was chewed as it was cheaper than the spun. By 1820 tobacco was so well integrated in Norwegian society that an anonymous author wrote *it is not possible to consider a ban on an Article used for so long and so widely*, and in the medical reports from the mid 19th century tobacco was described as *common*, often consumed with alcohol. Contemporary illustrations such as picture 6.2 also frequently depicted members of the rural population with a pipe.

539 Thue, F.W.: Kristiansund, TJ, hefte 16, 1796.  
540 *Den lille tariff*, Christiania 1820.; SSB: www.ssb.no/histstat
Probate inventories and rural traders’ archives also confirm that tobacco was a common commodity. In the probate inventories from Herøy there are few traces of the actual tobacco, but several of it having been consumed; 10 percent of the inventories in the database include unpaid bills mentioning it. In the Austrheim inventories few letters of debt were noted at all, and none mention tobacco. This does not mean that they did not use it, only that they used less credit to pay for it. Studies of rural traders’ inventories in Herøy show that they had large quantities of different sorts of tobacco, for example one vog leaf tobacco (ca 18 kilos), or even four vog (ca 72 kilos) best Virginia leaf tobacco. Andreas Holmsen’s study of a rural shop owner in Elverum (inland Eastern Norway) between 1826 and 1840 shows that tobacco made up 7 percent of the sales. It was the fourth highest sold product, after spirits 23 percent, grain 21 percent and coffee 11 percent. For those running privileged guesthouses, tobacco sales were likely to have been similarly important, especially once permission was granted for them to sell “necessities” like tobacco in the 1770’s. That the market for tobacco was significant is further supported by the steady imports of pipes, attempts at establishing pipe factories and demand for tobacco accessories such pouches or snuff boxes.

6.2.4 Share of wages spent on exotic goods.

To get an impression of how accessible exotic goods were for the Norwegian population it is useful to compare the prices with the wages of agricultural workers and servants. Lacking annual wage series for the 18th century it is possible to use wages reported in contemporary topographic descriptions. Even if free clothing, food or lodging often was part of the wage, the examples still provide an indication of purchasing power.

Male day labourers in Rakkestad were paid 6 sk a day both in summer and winter, in total 22 rdl (2112 sk) annually. They also received food. Assuming one pipe filling (ca 3 grams) was smoked a day this would amount to 1095 g. Tobacco costing 20 sk a pound (10 sk a

541 Probate inventory 22/4 1822 Rasmus Rønneberg.; Probate inventory 31/4 1788 Margrethe Rønneberg
544 Basso, H.: Rakkestad, TJ, hefte 17, 1796, p. 85

234
mark\textsuperscript{545}) in 1795 would total 40 sk a year, taking up ca 1.5 percent of his annual wage, depending of course on the sort and quality of the tobacco. In comparison, in Axel Smith’s idealized household budget for Trysil (see chapter 4, table 4.1) tobacco, together with expenses for artisans, made up 5 percent of the costs.\textsuperscript{546} Smith combined tobacco and artisans as he perceived spending resources on both to be wasteful. At a community level (table 4.2) he estimated that tobacco represented 7 percent of the community’s expenditure. Regional variations were significant and should be kept in mind. Estimates from Sunnmøre in 1762 by Hans Strom show that male adults received 4 rdl in annual pay when working as servants (food, lodging and some clothing was included), and that tobacco users spent about a quarter (120 to 144 skilling) on their habit. At the price of 24 sk per pound in 1761\textsuperscript{547} this added up to five to six pounds (2.5 to 3 kg) a year.\textsuperscript{548}

With regards to sugar the male worker in Rakkestad would spend about 3 percent of his wage purchasing the equivalent of the 1795 per capita average (1.07 kg) of 34 sk. Coffee was expensive in the 18\textsuperscript{th} century; to purchase the 1795 per capita amount of coffee 0.43 kg (0.86 pd) at the price of 48 sk per pound (in 1799)\textsuperscript{549} he would have to spend 1.9 percent of his wage. This indicates that coffee and sugar were marginal products for day labourers. Even if food was included in his pay, the high price of the goods make it unlikely that the farm he worked for would serve it with any frequency.

6.2.5 Norwegian exotic goods consumption compared

Compared to other countries, the Norwegian per capita sugar consumption in the 18\textsuperscript{th} century appears to be at a relatively average level. It lagged somewhat behind countries with sugar producing colonies such as England, which in 1750-9 had a per capita consumption of 7.5 kg and 10.5 kg in 1770-9. This was more than in Austria which had no such colonies and had an

\textsuperscript{545} Fløystad, I.: 1979, p. 230-1.
\textsuperscript{546} Smith, A.: Trysil, TJ, hefte 23, 1797.
\textsuperscript{547} Fløystad, I.: 1979, p. 230-1.
\textsuperscript{549} The price of 1 pound of coffee paid by Ole Olsen Sætren i Østerdalen, 23 nov. 1799 to the Christiania merchant Andreas Schiøller. It should be noted that the merchant would not have been permitted to sell coffee to rural areas until 1799 Source: RA, Oslo, Privatarkiv nr 87, Andreas Schiøller,
average per capita consumption of 0.15 kg in 1780. Recent estimates for Denmark indicate per capita sugar consumption in 1750 at 1.8 kg, rising to 6 to 8 kg towards the end of the 18th century, the latter being about ten times more than Sweden’s consumption. In 1845-6 contemporary comparisons place the Norwegian consumption of 2.5 kg per capita behind early industrialized countries like England (8.5 kg), Belgium (3 kg) and France (3.8 kg), but ahead of the German states (3.8) and Russia (0.6). The accuracy of the estimates for other European countries should be treated with caution.

Carol Shammas defined a mass-consumed commodity in the early modern period as one which would be consumed daily by more than 25 percent of the population. For sugar she estimated that this would be about 10.91 kg annually (which enabled a person to sweeten food and drink “regularly”). The Norwegian estimates, as well as those of all other countries except Denmark, England and Wales, lag far behind this in the 18th century. The significant difference between Norwegian and Danish 18th century per capita estimates for sugar begs further analysis. The spread of sugar should not be viewed in isolation from the other exotic goods. In Norway it was especially connected to coffee since it removed some of bitterness (and it was often combined with milk), making the exotic drinks more acceptable to the European palate.

Per capita coffee consumption began increasing in the second and third decades of the 19th century. This growth coincides with the liberalization of trade, new producer countries entering the market, as well as rapidly declining prices. Viewed in the context of its contemporaries, the Norwegian per capita coffee consumption in the long 18th century did not lag far behind other countries. Dutch per capita coffee consumption has been estimated at 2.8

kg in the 1770s, whilst the French consumption was closer to the Norwegian: 0,24 kg in 1781-90, 0,24 kg in 1815-24 and 0,29 kg in 1825-35.  

Compared to estimates of per capita tobacco consumption in Austria of 0,5kg in 1780 and 0,79 kg in 1800, and in Britain 0,8 kg in 1759, 0,7 kg in 1785 and 0,45 kg in 1795 the Norwegian consumption appears to be fairly average. Contemporary calculations from 1845-6 concur. The Norwegian per capita consumption was 1 kg, while Prussia’s was 1,5 kg, Belgium’s 1,3 kg, Denmark’s 0,8 kg and Sweden’s 0,6 kg. Assuming that a pipe in the late 18th century held approx. 3 grams tobacco, annual consumption would be 1095 g. This meant that approximately 48 percent of the population in Trondheim and Christiania stift could in 1780 enjoy a pipe a day, in 1785 61 percent, in 1790 52 percent and in 1795 36 percent. This is above the 25 percent limit which Carol Shammas set as the definition of an early modern mass-consumed commodity. In England and Wales this threshold was already passed in 1670, possibly earlier.

6.4 The circumstances of the consumption

As we all know, neither coffee, tea, tobacco nor many spirits taste very appealing the first time they are tried. In fact one needs time, and often sugar and milk (for coffee and tea), to become accustomed to the bitter flavours. In many cases they are also, like sifted wheat, less nutritious, or like sugar, provide empty calories. So why did early modern people in rural Norway start consuming these goods? To better understand this it is necessary to understand the circumstances in which they were consumed. This will help explain how consumer aspirations for these goods were created, and answer why people chose to consume them again and again, until in the end, they became (as we are) addicted and unable to imagine life

556 Aschehoug, A.: 1890.
557 Customs records for Trondheim and Christiania, divided by the populations in these stift.
without them. The circumstances were linked to changes in ideals of physical and social comforts, as well as in work.

Supposed health benefits were amongst the first arguments propagating changes to the traditional diet. Bread made using sifted wheat was supposed to be beneficial for the digestion. Spirits were claimed to have similar effects, but also to cure sicknesses; to this day it is said that a glass of cognac helps against a sore throat (and much more…). Tea and coffee were described as medicines in the 43 questions in 1743, and tobacco was thought to prevent leprosy, and ease coughing and chest pains. None of them do in fact offer any health benefits; in fact, quite the contrary if consumed to excess. The supposed medical advantages may have motivated some, but the arguments were rarely mentioned in the 18th century, and so they were probably of less significance. Instead the sifted wheat/white flour led to a less nutritious diet, the greater availability of spirits and tobacco to increased drunkenness, social problems, declining health, and over time, sugar would lead, as we know today, to declining dental health and most prominently today: obesity.

Instead, the social comforts and the spread of new forms of sociability were more important for their distribution. The positive experiences of sharing a pipe, and as the 19th century progressed, also a cup of coffee or a sweet cake, helped bind friends closer together and could break the ice between strangers, irrespective of whether one was in a large and merry crowd, or a quiet twosome in a ramshackle forest shelter. The church was perhaps the most institutionalized of these gatherings. In the 18th century social bonds were made over puffs of tobacco on the church stairs, and in the 19th century over a cup of coffee and a sweet cake.

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Tobacco was strongly present in male social gatherings in the 18th and early 19th century, often combined with spirits. In both urban and rural areas they were linked to the new forms of sociability, separate from the household, and often at guest and drinking houses. Both were connected to younger men in particular and to men who for longer periods were away from their families. This is unsurprising. They earned their own money and had few family responsibilities, and the seasonal work which isolated these men from their families may explain their bingeing on payday. In fact this is a well known trend in most cultures with male seasonal labourers. Women also smoked, but little is known about the social settings in which it occurred.

Coffee and tea were also linked to new, more acceptable forms of socialising. Functioning as substitutes for alcoholic drinks, they enabled the emphasis of new ideals such as more dignified and genteel manners and behavior. Even if coffee and tea was drunk by both genders, the drinks still had important social implications for women. As women in general would rarely drink spirits, or at least consumed less of them than men did, non-alcoholic drinks like coffee and tea made it possible for women to attend more social gatherings and stay longer without having to endanger their reputations. The men also stayed sober by drinking these beverages, and this also increased the places in which men and women could interact. To use a contemporary phrase one could say coffee and tea expanded the “dating scene”. These changes in social interaction were primarily restricted to the upper reaches of urban and rural society, but gradually spread to the rest of the population from the early parts of the 19th century.

The new foodstuffs could also be used as expressions of individuality and status in relation to others, or at least of how a person wanted to be perceived by others. Hans Strøm wrote that:

*tea and coffee is frequent amongst those living in Hoksund, Vestfossen and the other Dorper,*

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but otherwise not very common in rural areas.\textsuperscript{566} The population of Hoksund and Vestfossen were described as predominantly people engaged in seasonal labour in the timber trade. The work centered on the large saw mills located there. Purchasing and serving these new drinks distinguished an 18\textsuperscript{th} century lumberjack from his peers, and possibly marked him out in the eyes of the girls. In other layers of society, owning beautifully decorated utensils specifically designed for consuming, storing or serving these goods similarly helped display their status.

Even if price in most cases would have dictated choice, the possibility to choose amongst different varieties of a commodity was another way of showing individuality. Grains were available both as coarse and finely milled flour. Their use reflected wealth, but also the refinement of cooking skills. Sugar was available in a number of varieties, all priced differently; syrup was cheapest, while refined white sugar was the most expensive and considered finest. In the middle range was sugar-candy (kandis) and “top sugar”. Tea was also available in different sorts: cheap congo or bohe tea, or the more expensive ziong zioung tea and songlo tea. The same was the case for a large variety of alcoholic drinks of both domestic and foreign origin.\textsuperscript{567} Of tobacco, altogether 40 varieties were noted in the 1761 state price list: from expensive Spanish rape, to the cheapest leaf tobacco, including different sorts of wet and dry snuff as well as chewing tobacco.\textsuperscript{568} Using different varieties, depending on the occasion and social setting, was also possible; consuming the expensive varieties when in public, and saving money by using the cheaper ones when in private.

\textsuperscript{567} RA, Oslo, Generalfollkammeret, tollregnskap 1780 – 1795, Christiania, Drammen, Trondheim.; Adverts in Norske inteligessedler 1763, 1773 and 1823.

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Consuming these goods also gave an air of refinement. By eating white bread and cakes in accordance with French or German fashions enabled a person to take part in the same consumer trends as those spreading in other European cities. Tea drinking enabled people to take part in the illusion of Chinese tea rituals which they had become aware of through publications such as “A meeting with a Chinese merchant in the Præanger regency in Java”.\textsuperscript{569} Tobacco was similarly associated with the exotic world as seen on the tobacco stamp depicting a smiling, pipe-smoking African sitting on tobacco barrels or surrounded by tobacco leaves.\textsuperscript{570} In this way Norwegian consumers became aware of the connection between the tobacco they put in their pipe, and its exotic origins in the West Indies or in Virginia. Picture 6.3 shows a tobacco stamp depicting an elephant with a pipe smoking rider shows there was

\textsuperscript{569} “Et besøk hos en Chineser i Préanger-Regentskapet paa Java” in Historisk –geographisk Archiv : samlet og utgivet af J. Chr. Riise., nr. 39, Copenhagen, 1848.

\textsuperscript{570} SA, Trondheim, Trondheim Magistrat, Tobakksfabrikasjon og salg 1778-1786, boks Fe 21.
some confusion surrounding the origins of the goods (especially when the elephant looks like a cow with a trunk).

Not consuming exotic goods was also a way of showing individuality, and even refinement. The critical discourse of contemporaries on tobacco shows how some of those who considered themselves educated and adhering to ideals of refinement, cleanliness and sobriety, distanced themselves from the chewing, snuffing and pipe smoking of the rest of the population. Some farmer and cotter households were reported to refrain from tobacco and spirits, but their motivations are not possible to discern.\textsuperscript{571} In the 18\textsuperscript{th} and 19\textsuperscript{th} century religion motivated many to lead more sober lives, replacing alcohol and tobacco with coffee or tea.

For many in the late 18\textsuperscript{th} century, exotic goods, most especially tobacco, were closely tied to work. More precisely, as small comforts which helped suppress hunger and anxiety, as well as providing a little extra energy and concentration in an otherwise strenuous working day. Axel Smith wrote that in Trysil the lumberjack gnawed constantly at the poor tobacco twist. Not a tree does he fell without the sweet stump between his teeth, and after having driven the logs for a while, he would light and puff his pipe.\textsuperscript{572} The same was indicated for fishermen, and W. Braun Tvedte wrote: tobacco is considered by the fisherman to be a necessity during his strenuous work.\textsuperscript{573} In contemporary paintings, people who are smoking are often depicted either working or resting from work.

\textsuperscript{573} "tobakken ansees af Fiskeren for en Nødvendighed under hans anstrængende Arbeide” Braun-Tvedte, p. 115.
When coffee and tea became more readily available in the 19th century they had similar effects; a warm cup helped heat cold hands and bodies which had been pulling nets out of the cold northern seas or wading through knee-deep snow to cut trees. Stimulus or caffeine and theine also kept people awake so they could work longer, which was useful both for a trader needing to finish accounts, a lumberjack trying to fill his quota of logs or a wife spinning linen into the night to earn the household some additional money. If sugar was added to the drinks or other foods, the extra energy enabled more activity. Similarly, spirits also provided energy, but also dulled pain and physical discomforts like frostbite and blisters; and perhaps remedied homesickness and loneliness. Sifted wheat did not become common on a daily basis in rural households until well after the period studied here, but wheat breads gradually became more available through the development of guesthouses and rural shops. The loaves were less nutritious, but still filled the belly so that one could work slightly longer. In this way the new foodstuffs were not merely small comforts, but they also helped lengthen the workday.
Work in the form of market-oriented productive activities helped drive part of the dietary changes, as is noted by contemporaries. Strøm argued that the recent growth in profits from fishing financed increased tobacco and alcohol consumption. Melchior Falch noted in connection with the budget discussed in chapter 4.4, that the non-farming population in Sunnmøre depended on the market for grains, paying for it with earnings from fishing. Strøm argued that the recent growth in profits from fishing financed increased tobacco and alcohol consumption. Melchior Falch noted in connection with the budget discussed in chapter 4.4, that the non-farming population in Sunnmøre depended on the market for grains, paying for it with earnings from fishing.574 Coastal areas like Sunnmøre had good access to tobacco through their own town travels or through passing domestic and international traffic.575 Similar connection to exports is found between the tobacco consumption of inland peoples. Axel Smith argued that approximately half of the sum [spent on tobacco] is due to the timber trade. It certainly leads to [the purchasing of] some 40 additional mats of tobacco that would otherwise not have been possible.576

6.5 Conclusion:
The dietary changes in pre-industrial rural Norway were gradual, but as with the changes in other parts of its material culture, such as in housing and furnishings, over time they were nonetheless significant. The gradual shift to finer grains purchased from the market, more alcohol, and the rising per capita estimates of exotic goods show that Norwegian consumption was in line with other European countries. Changes in global trade during the 19th century only strengthened these trends as they made the goods cheaper and more readily available. Put together they show that a significant share of the Norwegian population in the 18th century and early 19th century consciously chose to consume the new foodstuffs, consistent with Carol Shammas’ observations about England during the same period.577 In some cases the rural Norwegian populations’ dietary consumption came at the expense of sensible future investments, or a full belly.

As with durable and semi durable goods the distribution of new foods in rural Norway was connected with market participation. Those closest to urban areas, or engaged in the market, especially the export sectors, were among the first to pick up the new dietary trends. With tobacco, the spread is more difficult to identify as it took place prior to the scope of this study, and was already established as a mass consumer good by the mid 18th century. The spread of the new foodstuffs also lead to stronger links between the rural Norwegian population and the development of world trade. Having long been mainly producers supplying goods to the world market, the new diets engaged them directly as consumers of products originating from across the oceans.

The new foodstuffs were also linked to new ideals such as increased social comforts. These took form as a greater variety of meals and dishes, more social spheres for women, as well as sobriety and more refined manners, at least in some circles; mostly those with money. For others, the changes, which the new foods constituted in the 18th century, were mainly in the form of small, everyday luxuries providing physical comfort, and renewed, if false, energy to stay awake, concentrate better and work longer. These social changes helped create consumer aspirations which raised the household’s motivation to participate in the market. As many of the new foodstuffs became available in larger volumes and lower prices, it became possible for more people to realize their consumer aspirations.

From an economic perspective the most important impact of the exotic goods lay in the fact that they increased the population’s interaction with the market. Since most of the new foodstuffs had to be purchased, households required resources with which to buy them. This again required increased market oriented production, or the allocation of resources away from activities such as making beer to buying coffee. As such, the new dietary trends motivated households to engage more in the market. That is not to say that it was these goods which turned households to the market in the first place; the contemporary descriptions all agree that households first met the new foodstuffs through their involvement in the export sectors. But once engaged, the new foods made people crave more, and so increase their market participation.
Chapter 7: Conclusion – the slow but safe path to a market economy

The rural Norwegian economy in the eighteenth century was never as developed as that of England or the Netherlands. Nor was it as fast-growing and integrated as it would become in the nineteenth and twentieth century when technological and institutional developments helped make it a modern market economy. Even if, as this thesis has suggested several times, much work still remains to be done on pre-industrial Norway, it is nevertheless clear that significant economic and social structural changes taking place in the eighteenth century facilitated developments which prepared the way for the later industrialization and modern market economy. The process was both different and similar to that found in the economic leaders.

That pre-industrial rural Norway experienced economic growth and development is confirmed by several indicators. Macroeconomic estimates indicate a gradual economic growth and developing internal market. Population growth, increased life expectancy and reduced child mortality show that more people survived, they also lived longer because of healthier lives and improved living conditions. Contemporary statistics and later estimates show rising agricultural outputs which, since they were not able to keep up with the population growth, were supplemented by further imports. Growing timber and fish exports, as well as a larger fleet, also point to increased efficiency in response to rising domestic and foreign demand. Dependence on foreign grain, as well as rising consumption of exotic goods shows a population increasingly willing to take part in the world market as consumers, and changing relative prices made it possible for more to do so. Contemporary descriptions and material sources confirm the changes, telling of improved housing, warmer bedding and diets changing from protein rich foods produced by the household itself, to carbohydrate rich foods increasingly acquired from the market.

But what were the economic and structural changes behind these development? It is on the production side that the Norwegian pre-industrial development differs the most from the
economic leaders. Technology, empire and a consumer revolution are often mentioned explanations for the growth found in the pre-industrial economic leaders. These were less essential in the Norwegian case: technological change was gradual, occurring in small jumps until the Industrial Revolution, and even if the neutrality policy provided unique market opportunities, the Danish-Norwegian empire was small compared to the others, and there is little trace of a consumer revolution taking place in the long 18th century in Norway. Instead, significant drives behind the developments occurring in rural Norway in the long 18th century were inter-regional European trade, pluriactive organization of production, and consumer aspirations.

The Norwegian pre-industrial economy was an increasingly open economy with emphasis on exports to the European market. The exports were processed goods which went straight into feeding the growing European population and economy; the dried and salted Norwegian fish helped feed the European urban masses. The timber and iron helped build ships and towns in Europe, and the Norwegian ships and sailors freighted goods in the growing European inter-regional trade. Estimates indicate that 20-30 percent of the Norwegian output came from the export sectors in the 18th century, far exceeding most other countries at the time.

The profits from the export trades were spread among the Norwegian population. The export were controlled by Norwegian merchants, but much of the processing occurred in rural areas and was significantly influenced by rural interests. This also enabled profits to trickle into rural areas and households. Rising prices of timber, fish and freight, and as well as goods for the domestic market such as livestock provided increased income which due to gradual or even declining prices of necessities and other goods provided real profits for more households. However, the profits made in the export trades were often enabled by natural conditions or political manoeuvring. The “busts” occurred when one or both of these failed.

This is not to say that the profits were evenly divided. Social divergence, meaning that a few acquired more than others, did not occur. In the changing economic structures not only
merchants in the exporting sectors, but also farmers, could and did increase their control over resources. Institutional change, such as a more legally formalised cotter system, as well as the gradual disbanding of old trading and production privileges, opened new opportunities for more rural artisans, and facilitated the formation of more mobile workers and producers. Lacking the security of land or other assets, many members of the rural populace led hard lives, especially as their numbers increased.

As Norway was not self sufficient in grain and several other necessities, households had to acquire the resources to buy it from the market, and the export trades provided a good opportunity to do so. In the wake of the proto-industry discussion, it was shown that many European households faced with similar choices shifted their production away from self sufficiency towards specialized production to be sold in urban areas or in the developing internal market. This was never really an option for pre-industrial Norwegian households. Despite significant developments especially in the opening of domestic trade, the Norwegian internal market could not be relied on to supply all necessities. For that, the urban areas were too small, transport infrastructure too unreliable and retail outlets not yet sufficiently developed to supply necessities reliably. The solution for most households was therefore pluriactivity, meaning that they engaged in several economic activities. Of these farming, in the form of agriculture and livestock aiming at both self sufficiency as well as sales was one example, others were often in the export trades, in transportation, or part of the early modern manufacturing of durable, semi-durable and perishable goods for the domestic market.

By spreading the risk through engageing in pluriactivities, households became accustomed to a slower-paced market but their pluriactivity offered more security if one “leg” failed. That this was a more “friendly” way which did not make households averse to the market economy is exemplified by the crisis during and after the Napoleonic war. After having retreated into agriculture during the war and post-war depression, households in the late 1820s and early 1830s again increased their market participation. The declining prices of Norwegian exports, especially timber in the post-war period, made the developing domestic manufacturing sectors more attractive, making households more susceptible, either willingly or out of necessity forced, to work in them. For the many involved in household manufacturing it also provided
entrepreneurial experiences valuable in the later Industrial Revolution. The pluriactive way to the market economy found in Norway may thus have been slower, but it proved a “softer way” to acclimatise to the new structures of the domestic, European and world economy. It also meant the forming of a flexible labour force which could be employed where needed, but which in times of crisis could be absorbed into agriculture.

In the Industrious Revolution theory, one of the supposed labour reserves redirected to production for the market were women and children’s labour. This is applicable for Norway, as the pluriactive way of organising the household’s production required both genders to work, but also allows flexible engagement in whatever activities appeared most beneficial for the household at the time. That the pluriactive activities, in most cases, could be organized to utilize the household’s resources at different times of the year enabled an efficient use of land, time and labour. It also allowed for seasonally diverse production and a more efficient economy, and explains how market participation could become so widespread amongst rural Norwegian households.

What appears most vital for the allocation of labour resources appears nevertheless to have been the development and predictability of the internal market to supply necessities. The household’s allocation of its labour resources between productive activities for self sufficiency and the market shows that these choices were conscious. The aims were security and profit, but which of these interests dominated would have varied from household to household, and over time.

There are no traces of what can be called a consumer revolution, but changes in consumption in the form of improved material standards are numerous. At the start of the century most Norwegian households were smoky and drafty one-floor, one room houses with open hearths or fire places, eating utensils were few, wooden and often communal. By the end, goods like chimneys, cast iron stoves, windows, plates and warmer bedding had spread to a wider share of the population. Goods like these were no longer limited in ownership to the wealthiest.
households; middling and even poorer households had access to them. Also the availability of sugar and tobacco increased, making it possible for many to consume them even on a daily basis. The changes continued into the 19th century when they took off as industrialization, and world liberalization increased the supplies and dramatically reduced costs. The changes in consumption during the 18th century correspond with differences in the way households and communities were connected to the market. Those like Herøy, engaged in the export sectors spent more of their households resources on durable and semi-durable goods than those like Austrheim, which were less engaged in the international trade.

The trends in consumption found in Norway follow along the same lines as consumer trends widespread in other Western European countries in the 18th century. One of these trends being falling relative prices caused by declining quality, mass production or at least more efficient production, or “breakability” as some call it. Examples of such are the exotic goods like tobacco and sugars which were cheaply produced by slave labor, or tiles and cast iron ovens which declined in price as the technology was spread. The increase of artisans and producers of manufactured goods also increased the competition and numerical availability of many durable, semi-durable and perishable goods, thereby also reducing prices. The stable or declining relative prices of durable and semi-durable goods, as well as the stable or rising production and inflation adjusted prices of Norwegian exports meant that more households could afford to purchase goods from the market, and in this way take part in the changing fashions or trends.

The other trend was that of increased physical and social comfort. By this is meant that the items tended to make the living spaces and physical surroundings more comfortable, such as cast iron ovens and chimneys reducing smoke, warmer bedding, more eating utensils, foreign spirits to dull pain and loneliness or a pipe of tobacco to calm nerves. Many of the items also provided social comforts such as books enabling civilized discussions, clocks which ensure precision and coffee and tea which were alternatives to alcohol, thus reducing drunkenness and increasing the social spheres of women. They were physically spread to rural Norwegian communities by the developing world and domestic market, whos spread also helped make it financially possible to acquire such goods for more households.
The Industrious revolution theory argues that it was consumer aspirations which motivated households in the early modern period to increase their market oriented participation. This was not so for Norway; European demand for Norwegian produce was the main driving force. However, as rural Norway became more integrated both with other Norwegian regions, and with the world market, the availability of imported grains, durable and semi-durable goods and exotic goods, combined with changing social ideals helped create consumer aspirations. Looking back from the 21st century we are not able to discover the individual households’ reasons for their choices and actions, but the improvements in material living standards show that for many it must have been the realization of their ambition to enjoy comfort in their lives. Perhaps experienced though small things like a warmer bed, more light, a cup of sweet coffee and a pipe of tobacco on a cold winter night. For the richest such things had always been available, but in the century or so around 1800, they became available for a wider share of the population, at least when political and natural circumstances were favorable.

The pluriactive way was the road chosen by most pre-industrial rural Norwegian households. It may not have yielded the same profits, but given the uncertainties of the early modern period it was a rational choice, providing a “softer” introduction to the market. The motivations to engage in so many activities must have varied; in times of hardship the principal focus was to have enough food to survive, at other times there was enough surplus to realise consumer aspirations for immediate, as well as long-term, physical and social comforts. The social and economic structural changes, which in the last half of the 18th and early decades of the 19th century enabled rural Norwegian households to gradually become accustomed to the market both as consumers and as producers, as well as accumulating knowledge and experience of how to function in it, were the vital foundations for the later rapid spread of the later Industrial Revolution and modern, capitalist market economy in Norway.
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Abbreviations:

HT= Historisk Tidsskrift (Norwegian)
SHT= Historisk Tidsskrift (Sweden)
SEHR= Scandinavian Economic History Review
SJH= Scandinavian Journal of History
EHR= Economic History Review
JEH= Journal of Economic History

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RA, Oslo= Royal archives in Oslo, Norway.
RA, Copenhagen = Royal archives in Copenhagen, Denmark.
SA= Statsarkivet (State archive).

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