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001. email	Janet L. Yellen to smwilson at 18:23:52.00. Subject: Hi. (1 page)	01/07/1999	Personal Misfile

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RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P1 National Security Classified Information [(a)(1) of the PRA]
P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
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P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [a)(5) of the PRA]
P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

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b(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
b(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
b(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Joseph E. Aldy (CN=Joseph E. Aldy/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 5-JAN-1999 11:36:18.00

SUBJECT: Schaefer questions

TO: Quindi C. Franco (CN=Quindi C. Franco/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Alan S. Polasky (CN=Alan S. Polasky/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

CC: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Attached is the second draft of the responses to the Schaefer questions.
Comments welcome.

Joe

=================== ATTACHMENT 1 ===================
ATT CREATION TIME/DATE: 0 00:00:00.00

TEXT:
Unable to convert ARMS_EXT:[ATTACH.D34]MAIL42549640W.036 to ASCII,
The following is a HEX DUMP:

9. **The Administration's forecast of "modest" costs of the Kyoto Protocol on the U.S. economy is predicated on the assumptions of developing country participation and full use of flexible implementation mechanisms. What would be the total costs to the U.S. economy if those two assumptions are not correct -- that is, if the major developing countries do not participate, and if the use of flexible implementation mechanisms is capped at no more than 50% of our 7% reduction target?**

The Administration's conclusion that the costs of the Kyoto Protocol will be modest if we are successful in implementing an effective international emissions trading system and we achieve meaningful participation by key developing countries reflects an understanding of the existing economic literature and the various cost-saving flexibility mechanisms of the Protocol. The Administration provided a set of illustrative modeling results to describe what it means by the term "modest". However, as noted in the July 1998 report "The Kyoto Protocol and the President's Policies to Address Climate Change: Administration Economic Analysis" (AEA), these modeling results are illustrative and do not include several important cost-mitigating factors, including the opportunities to sequester carbon dioxide, the Administration's electricity restructuring bill, and the Climate Change Technology Initiative. Any "forecast" of the costs should reflect these cost-mitigating factors. Further, as noted in my October testimony, it is important to consider the results from other economic models, and I reported on the preliminary results from the Stanford Energy Modeling Forum.

Regarding the issue of developing country participation, the Administration has previously made available results from our illustrative modeling analysis. On pages 297-298, 302-303, 322-325, 333, 337-339, and 351 of the "Kyoto Protocol and its Economic Implications", the published record of the March 4, 1998 hearing before this Subcommittee, are estimates of permit prices and resource costs to the U.S. economy of various forms of developing country participation. Again, any assessment of the cost of the Kyoto Protocol assuming that developing countries do not adopt emissions targets and participate in international emissions trading is sensitive to assumptions about the nature of Annex I trading, sinks, developing country participation in the CDM, as well as domestic policy efforts, such as electricity restructuring and the Climate Change Technology Initiative.

An assessment of the effects of trading caps on U.S. costs is also very difficult, especially given the uncertainty regarding the interpretation of sinks. However, it should be noted that a cap on the use of flexibility mechanisms set at 50% of the emissions target would not restrict the United States. For example, in the illustrative modeling analysis, the Administration assumed that the emissions target under the Protocol, as an annual average, would be 1515 MMTCE. Setting a cap so the United States could only purchase half of this 1515 MMTCE, on an annual average, would not be restrictive, because the United States, in the model, would need to reduce less than this on an annual average from its business as usual emissions level to comply with its Kyoto target.

10. What U.S. industries and sectors of our economy would be hardest hit by the Kyoto Protocol?

Although there may be increases in output in some sectors and decreases in others, we do not anticipate any significant aggregate economic effect if we achieve meaningful participation by key developing countries and effective international trading. The effects on energy prices described in my testimony and in the AEA will occur more than a decade in the future. Not only are these effects small relative to historical variations in energy prices, and offset by other policies like electricity restructuring, they would occur sufficiently far in the future to enable monetary policy to keep the economy operating at its potential. In energy-intensive sectors some reduction in output could occur, although given the very small predicted change in energy prices, impacts in most such sectors are apt to be minimal. In addition, the coal industry may also experience a decrease in output. However, in the illustrative modeling analysis, the Administration found that 2010 coal consumption would be greater under permit prices ranging from $14 to $23/ton than 1995 coal consumption.

11. Will the combination of tax credits, research and development, and emissions trading be sufficient to meet all of the U.S. target of a 7% reduction, or will additional measures be necessary? If additional measures are likely to be needed, what specifically is the Administration proposing?

The Administration has proposed a suite of efforts to abate greenhouse gas emissions. These include the tax credits and R&D funding through the Climate Change Technology Initiative, the Administration's electricity restructuring bill, industry consultations resulting in voluntary industry goals to reduce emissions, the Federal government's energy plan, and appropriate credit for early actions to reduce emissions by the private sector. In addition, the Administration has proposed a domestic trading program for the first commitment period, and supports international flexibility mechanisms where private firms operating in the domestic market can participate in the international emissions trading market, the Clean Development Mechanism, and joint implementation. Finally, the Administration supports the comprehensive inclusion of sink activities, and will provide appropriate incentives for increasing carbon sequestration. The Administration believes that all of these efforts, if adequately implemented, will be sufficient to meet the U.S. target.

14. Has the Administration offered its economic analysis for peer review.

No.

15. One of the assumptions upon which the Administration's economic analysis is based is "meaningful participation by key developing countries". Could you please explain what that meant for purposes of the economic analysis? For example what was the nature of the commitment that was assumed for countries like China, India, etc..... How are cost estimates impacted if countries like Argentina or South Korea take on commitments but countries like China and India do not?

For purposes of the illustrative modeling analysis, the Administration assumed that "meaningful participation by key developing countries" meant that the four non-Annex I countries in the Second Generation Model adopted emissions targets and participated in international emissions trading. The version of SGM we used happens to have specific modules for China, India, Korea, and Mexico. We assumed that the last non-Annex I region module, defined as the "rest of the world", did not have a binding target. For the illustrative modeling exercise, we assumed that these four countries had emissions targets set at their 2010 business as usual levels, but all reduced emissions well below this to participate in trading (in some cases, as much as 20% below BAU).

Cost estimates would be affected based on the extent and nature of participation by developing countries. However, even if some countries like China and India do not adopt emissions targets, they could still reduce emissions through the Clean Development Mechanism. An effective international market for trading emissions permits among industrialized countries -- even without taking into account the added benefit of including key developing countries -- would potentially lower the resource cost to the United States of climate change policy by more than half relative to a scenario in which all abatement is performed domestically, and would lower the price for emission permits (expressed as carbon equivalent) by nearly three-fourths. With the Clean Development Mechanism and Annex I trading, resource costs would be about two-thirds lower and permit prices four-fifths lower than a domestic only scenario. Trading among industrialized countries alone could bring costs down into a relatively modest range.

16. Dr. Yellen: Most of your testimony was about the costs of reducing greenhouse gas emissions. But you also mentioned that the same measures reduce pollution, thus bringing economic benefits. How can one compare the costs against the benefits of reduced pollution and reduced global warming?

Efforts to abate greenhouse gas emissions can slow the rate of growth in the atmospheric concentration of greenhouse gases thereby reducing the risks of climate change. In addition, abating carbon dioxide emissions from fossil fuel combustion can result in reducing the emissions of local air pollutants. These are two significant categories of benefits. Regarding the former category, however, there are substantial uncertainties that make estimating the economic benefits very difficult. Please refer to pages 40 and 41 of the AEA for a discussion of these difficulties. Regarding the latter category of benefits, the Administration found that the benefits from improving public health by reducing emissions of particulate matter and ozone precursors could be approximately one-quarter the costs of greenhouse gas emissions abatement. Please refer to pages 66 through 69 of the AEA for a discussion of this analysis.

17. **Dr. Yellen: Do you account in your economic analysis for the number of lives saved due to reduced pollution? If not, why not?**

The AEA provides a discussion of the ancillary public health benefits associated with abating greenhouse gas emissions abatement (pages 66-69). Implicit in the economic benefits estimates provided in this section is an assessment of the statistical life-years saved by reducing pollution. This assessment employed the methodologies used by the Environmental Protection Agency in its Regulatory Impact Analysis of the particulate matter and ozone national ambient air quality standards promulgated in 1997. In effect, the analysis does account for the number of lives saved due to reduced pollution.

18. **Dr. Yellen: In your testimony you project that the cost per household of implementing the Kyoto Accord will be "nearly fully offset" by price declines from electricity restructuring. You also comment that the electricity restructuring is likely to cause a significant reduction of greenhouse gas emissions. Why is that -- where would the reduced emissions come from? How are we going to get lower electricity prices, greater efficiencies, and technological innovations all at the same time?**

The Administration's Comprehensive Electricity Competition Plan (CECP) is estimated to reduce greenhouse gas emissions by about 25 to 40 million metric tons of carbon equivalent per year by 2010. Although competition will lower prices, which will tend to increase consumption, it will also provide a direct profit incentive for generators to produce more electricity with less fuel and improve energy efficiency as competitive sellers seek to maximize the value of their product offerings to buyers by bundling electricity with energy efficiency and management services. Specific CECP provisions that will yield additional emission reductions include a renewable portfolio standard, a public benefits fund that will support renewable energy and energy efficiency investments, "green" labeling to help consumers who value clean energy choose it, and a net metering provision encouraging the installation of small renewable systems.

19. **Dr. Yellen: The breakup of AT&T was followed by rapid technological innovation and adoption in the telecommunications industry. If the breakup of electricity monopolies also spurs rapid changes in electricity generation, transmission, and distribution technologies, how would that affect the cost predictions of current economic models?**

If electricity restructuring resulted in accelerated rates of technological innovation and diffusion than what has been projected by current economic models, and if these new technologies improve energy efficiency and the carbon efficiency of electricity generation and transmission, then the cost predictions by these models are likely to over-estimate the costs of abatement.

20. **Dr. Yellen: The second panel presented economic analyses that project higher costs to reduce emissions than ones you presented. Why do their results differ from the Administration's forecasts?**

In our review of the economic literature, we have found that the nature of the question a model attempts to address can significantly affect the results. In the Administration's analysis, we evaluated the Administration's position on important flexibility mechanisms and developing country participation. Modeling efforts that assume no international emissions trading, no participation by developing countries through the CDM and/or trading, and abatement only of carbon dioxide emissions from fossil fuel combustion do not reflect the Administration's position or many of the key components of the Kyoto Protocol. The modeling results from the Stanford Energy Modeling Forum (EMF) exercise described in my testimony confirm that the assumption about the scope of trading alone can affect permit price estimates by nearly a factor of ten. The EMF exercise found that the reduction in permit prices as trading expands from no trading to Annex I trading to full global trading is robust. On average, the EMF models found that Annex I trading would cut the U.S. permit price by 53% relative to a no trading scenario. Of these models, one estimated a 72% reduction in the permit price under Annex I trading. In full global trading, the permit price would be, on average, 80% lower than the no trading price. Several models estimated permit price reductions of about 90%.

21. **Many countries wanted the Protocol to address only the three major greenhouse gases, carbon dioxide, methane, and nitrous oxide. The Administration advocated, and won, inclusion of all 6 categories of greenhouse gases. What are the economic benefits of including 6 kinds of gases, instead of 3?**

By including all 6 kinds of greenhouse gases, the Kyoto Protocol provides two kinds of benefits relative to the 3-gas basket proposals. First, by pursuing a comprehensive approach to all greenhouse gases, the 6-gas basket can increase the environmental benefit by mitigating the emissions of the so-called synthetic gases, emissions of which are growing faster than of the other three greenhouse gases. Second, expanding the coverage of gases increases the flexibility in abatement. Given the high emissions growth rate in the synthetic gases, there may be low-cost opportunities for technological substitution relative to the other gases, whose emissions result from established and long-term infrastructure.

22. **You discuss in your testimony the cost-savings possible with effective international trading. Since the rules for international trading have not been agreed to, could you describe what you mean by an effective international emissions market?**

An effective international emissions market would likely have several desired properties, including active participation by the private sector, low transaction costs, competitive behavior by buyers and sellers, low rates of cheating, sufficient liquidity, and no imposed caps or taxes. Such a market would ideally work like any other well-functioning market for a good or financial instrument.

23. **You state in your testimony that the Kyoto Protocol will not affect aggregate employment. However, we have heard from other economists that this agreement could cost the U.S. millions of jobs. Why is the range of estimates so large?**

The estimates of employment effects vary substantially because of the nature of the models used and the kind of questions being addressed by the models. Regarding this first point, some models are better suited to project short-term economic activity while others are better suited to evaluate long-term economic activity. These short-term models were designed to project the state of the U.S. economy over the next several quarters and up to a year or two into the future. However, if model scenarios are conducted over a 10 to 20 year time horizon, these short-term models usually find higher unemployment resulting from implementing the Kyoto Protocol. Long-term models, such as the Second Generation Model, are conditioned on the assumption that aggregate employment effects are negligible. Given the long lead time before any impact would occur, this assumption is more appropriate.

Second, different models used to address different questions generate different results. In the short-term models, the estimates of employment effects tend to be driven by estimates of permit prices and costs to the economy. Since some of these analyses assume no international emissions trading, the costs to the economy and the subsequent employment effects are projected to be significant. However, these scenarios do not reflect the Administration's position or the many cost-saving attributes of the Kyoto Protocol. A smarter approach to reducing global emissions, through effective international emissions trading, would significantly reduce the economic costs to the economy and result in no significant aggregate employment effects.

24. **The Kyoto Protocol does not require countries to meet binding targets until 2008. However, there are certain aspects of the Protocol, such as the Clean Development Mechanism, that allow for emissions reductions to occur as early as the year 2000. Further, the Administration is pushing for tax incentives and research and development now. Dr. Yellen, why is it so important to do these things now?**

The Administration advocated for the 2008 to 2012 time frame for the first commitment period, later than some other countries' proposals. The importance of setting binding targets a decade out is not so effort can be postponed, but so emissions reductions can occur along a gradual and credible path in the early years. A more gradual path than what others proposed can reduce adjustment costs while attaining the same ultimate environmental goals. To start along this gradual path, the Administration has supported tax incentives and R&D funding for technologies that can reduce greenhouse gas emissions. In addition, the Administration supports the banking of emission reduction credits beginning in 2000 from CDM projects. On both the domestic and international scenes, these efforts provide the incentive to develop and deploy new technologies to reduce emissions and to begin the transition that is necessary to achieve the emissions targets for the first commitment period. If we delay our efforts to abate emissions until 2008, then we increase the risk of either having much higher costs of complying with the Kyoto targets or of not complying with the targets.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Nouriel Roubini (CN=Nouriel Roubini/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 5-JAN-1999 10:46:58.00

SUBJECT: Brad Setser preliminary comments on Chapter 7 of ERP.

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Here is the lastest message yesterday from Brad with some preliminary Treasury comments on the second draft of chapter 7.
Nouriel

---------------------- Forwarded by Nouriel Roubini/CEA/EOP on 01/04/99 07:23 PM ---------------------------

"SETSERB%DOM13.DOPO8" <BRAD.SETSER @ treas.sprint.com>
01/04/99 06:07:14 PM
Record Type: Record

To: Nouriel Roubini/CEA/EOP
cc:
Subject: Comments on Chapter 7 -Reply

Date: 01/04/1999 06:14 pm (Monday)
From: Brad Setser
To: EX.MAIL("Nouriel_Roubini@cea.eop.gov")
Subject: Comments on Chapter 7 -Reply

thanks.

Caroline is reviewing our comments, but I am fairly sure that we agree with the Fed's comment that "it still seems long." She also needs to decide if you still have more detail than we are comfortable with (yes, we are paranoid!)

But i will give you a couple of my comments in advance, subject to the proviso that Caroline may disagree --

1/ section on XR is still too long. Needs more pruning. I would also try
to
avoid any judgements on currency boards (i.e. it worked for argentina, argentine is now doing great, etc) in your box. straight facts.
Otherwise, need to be sure your judgements correspond tightly with

whatever we have said on currency boards in public over the past two years. Do not want any news here.
2/ I think you need need slightly tighter correlation between categories in G-7 statement and your categories -- i.e. you should use promoting more sustaible XR in emerging markets or whatever precise language used by the G-7 as a heading rather than XR in small coutries, similarly, we need to think carefully about your new structures for official finance category -- the G-7 called for "new ways to prevent and respond to crisis, inlcuding ... both new forms of official finance ... and greater private sector particpation ..." which is a formulation we probably should keep.
3/ I am still trying to figure out where the best place to put the section on
controls on outflows is. I am a bit uncomfortable with it under the heading of prudential reg etc in emerging markets -- jsut because it fits poorly as a subheading under this broad category. In a way, Malayisan controls are a form of crisis response, but not one we want to encourage. But I am not sure that this is right place for it either (itprobably is not). Outflow controls fit poorly into the G-7 categories. I
do not have an answer, jsut wanted to point out that it seems to sit awkardly under the current heading.

Finally, a favor -- could you LAN/ or fax me a copy of the Frankel piece on controls on inflows -- the one he did last February or March?

thanks.

bws

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Steven N. Braun (CN=Steven N. Braun/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 5-JAN-1999 18:03:45.00

SUBJECT: On Secure Faxing for the Chairman's Data Worksheet to Treasury

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Mary Fibich (CN=Mary Fibich/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

CC: Rebecca M. Blank (CN=Rebecca M. Blank/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

CC: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
I just faxed the "Chairman's Data Worksheet" to Secretary Rubin using the Secure fax down the hall at the PFIAB (President's Foreign Intelligence Advisory Board, Room 340). Their fax machine was an ordinary fax machine, but it was wired through a STU-3 phone--identical or at least similar to the one in the Chairman's office.

Visiting Room 340 was easier than visiting the White House Situation Room (which is what Alice did 2 weeks ago with the Personal Income data). One needs a Blue pass just to knock on the door of the Situation Room.

It would be easier still if we had our own secure fax setup.

If we wish to continue using the Secure Fax to send the Chairman's data worksheet to Treasury, could we either?

1) make it part of Alice or Sandy's job to deliver the faxes to the Situation room.

2) establish a long-term relationship with the PFIAB (Chairman Warren Rudman: 456-2352) allowing us to use their secure fax. (I am sure they would be happy to let us use their machine on an occational basis, but three times per week might be abusing their courtesy.)

3) hook up one of our fax machines to the STU-3 phone in Janet's office. (this would require Janet's consent because it would mean putting a fax machine in her office, and someone entering her office to use it around 5-6 pm. every evening on which there is a release). Alternately, the STU-3 phone could be relocated.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Nouriel Roubini (CN=Nouriel Roubini/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 5-JAN-1999 12:24:24.00

SUBJECT: On Tresury's sensitivity and fuzziness

TO: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Jeff, Janet, just to give you an idea of how Treasury is sensitive about talking explicitly about controvesial issues, see the response reported below by an unnamed Treasury official to Stan Fischer's speech recommending an international lender of last resort role for the IMF.
I have never seen such a cautious and fuzzy response....

NYT 5/1/98:
"There are a lot of interesting proposals out there, but there are a number of concerns associated with all of them," a senior Treasury official said Monday, on condition that his name not be used. "We're still working through how to address those concerns, and whether we can adequately address them at all."

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Nouriel Roubini (CN=Nouriel Roubini/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 5-JAN-1999 10:45:45.00

SUBJECT: My notes to Treasury on changes in second draft of Chapters 6-7 of ERP

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Janet, for your info I attach the message I sent to Caroline before Chrismas explaining the changes I made to chapters 6-7 to consider Treasury's concerns.
I have not received yet their comments on this second draft but Brad Setser just sent me some preliminary suggestions that I will forward you in a separate email. It will give you an idea of the type of their concerns. Essentially when I met them they agreed that I could speak about any topic including controversial stuff such as derivatives, hedge funds, capital controls, international lender of last resort, exchange rates as long as the tone and substance was not new and possibly causing news reaction. So, this is why I framed the new steps section in terms of the points of the october 30 G-7 statement; they really care about all this as you will see from Brad's email. We should meet tomorrow and figure out what to do.
Thanks for all the help.Nouriel

12/22/98
Caroline,

you should be receiving today the new draft of the international chapter(s) of the ERP. In the revision I tried to follow the many very useful suggestions that I received from you and the other colleagues last Friday.

The section on "open issues" is now a section on "next steps" and is motivated by the 6 points in the October 30 G& Statement and Declaration.

Direct references to international lender of last resort are dropped

Exchange rate discussion is couched, as much as possible, in the terms of the G22 WG3 report,

Discussions on bank regulation, hedge funds and derivatives draws on official statements (such as that of Treasury DAS Anderson) and so on.

The Treasury memo for the President has also been usedas a reference. In general, I tried to make sure that any policy issues are based on official administration positions already publicly expressed.

Given the size of the chapter we had to cut it into 2 chapters. The second chapter (Evolution and reform of the international financial system) covers 4 topics: the G22 reports, the next steps in int. fin. architecture reform (i.e. the 6 new items in the october 30 declaration), EMU and prospects for euro becoming an international currency. I hope you do not mind the split into 2 chapters; it is not meant to give emphasis on the architecture stuff but, as the chapter was twice as long as any ever written, we eventually decided to split it into two.

You may still find the discussion of some topics a bit too extensive in section 7.2 on next steps. I have bracketed (in square brackets) a number of sentences there that could be dropped and/or revised to shorten the section. Let me know what you think.

There is a subsection of "next steps" on IMF reforms where I wrote very little since I did not know what to do with it. One idea may be to take the subsection in Chapter 6 discussing the critiques of IMF and our defense of them and put it instead in Chapter 7; for example my defense of IMF bailout packages against the international moral hazard critique fits well there. So far, all that material on the IMF is in Chapter 6 but I would be happy to move it to Chapter 7. Your views on this would be most useful.

I tried to do my best to adhere to the spirit and substance of your suggestions. I hope the current draft is a good step in that direction. I will work with you until you are satisfied with the materials in these two chapters.

I look forward to receiving your comments. Feel free to call me if you want to talk about the chapters.

Nouriel

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Nouriel Roubini (CN=Nouriel Roubini/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 11:51:34.00

SUBJECT: Israel JEDG likely to be cancelled

TO: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
David Ranz from State called to inform me that the Israel JEDG is likely to be cancelled (i.e. posponed until the next fall). The reason is the Israeli elections in May and the concern that a high profile event such as the JEDG may get caught into Israeli electoral politics. Stu Eisenstad has not formally made a decision to cancel it but it is likely that he will do so by the end of this week. We will be formally informed when the decision is made but David wanted to let us know in advance of this development.
Nouriel

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 12:23:47.00

SUBJECT: DAILY TALKING POINTS -- PRESIDENT CLINTON AND VICE PRESIDENT GORE: ECONOMIC PROGRESS FOR AMERICA,S FAMILIES -- THE 1999 BUDGET SURPLUS

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
---------------------- Forwarded by Michele Jolin/CEA/EOP on 01/06/99
12:23 PM ---------------------------

Joseph C. Fanaroff
01/06/99 11:36:50 AM
Record Type: Record

To: See the distribution list at the bottom of this message
cc:
Subject: DAILY TALKING POINTS -- PRESIDENT CLINTON AND VICE PRESIDENT GORE: ECONOMIC PROGRESS FOR AMERICA,S FAMILIES -- THE 1999 BUDGET SURPLUS

Message Sent
To:____
All WHO Users
All OVP Users
All OPD Users
All OSTP Users
All NSC Users
All CEQ Users
All CEA Users
William C. Haymes/OA/EOP
Leland L. Scott Jr./OA/EOP
Debra R. Reid/OA/EOP
Contance M. Colabatistto/OA/EOP

=================== ATTACHMENT 1 ===================
ATT CREATION TIME/DATE: 0 00:00:00.00

TEXT:
Unable to convert ARMS_EXT:[ATTACH.D45]MAIL40290360C.036 to ASCII,
The following is a HEX DUMP:

PRESIDENT CLINTON AND VICE PRESIDENT GORE:
ECONOMIC PROGRESS FOR AMERICA'S FAMILIES -- THE 1999 BUDGET SURPLUS

January 6, 1999

"Today, I am proud to announce that the era of deficits is over. We are entering the second year of the era of surpluses. We will close out this century with the largest surplus in the history of our nation."

President Bill Clinton
January 6, 1999

Today, President Clinton will announce that the Office of Management and Budget's (OMB) preliminary projection is that the 1999 budget surplus will be at least $76 billion, which is 50 percent higher than the Administration's last projection and would be the largest dollar surplus in American history. The President will emphasize that although the budget is now running a surplus, now is the time to solve the generational deficit by putting Social Security on firm ground for the 21st Century.

THE LARGEST BUDGET SURPLUS IN AMERICAN HISTORY. In 1993, President Clinton and Vice President Gore put in place a three-part economic strategy to: (1) cut the deficit, help reduce interest rates, and spur business investment; (2) invest in education, health care, and technology so that America was prepared to meet the challenges of the 21st Century; and (3) open markets abroad so that American workers would have a fair chance to compete and win across the globe. Today, America's fiscal house is in order. **The Office of Management and Budget now projects that the budget surplus in fiscal year 1999 will be at least $76 billion.**

- **Instead of a $404 Billion Deficit, We will have at Least a $76 Billion Surplus This Year.** When President Clinton took office, the Congressional Budget Office (CBO) projected the deficit to be $404 billion this year; using preliminary information, the Administration expects the surplus to be at least $76 billion this year.

- **The Biggest Dollar Surplus in History.** In 1992, the deficit was $290 billion --the biggest dollar deficit in American history. This year, the Clinton-Gore Administration expects the surplus to be at least $76 billion --the biggest dollar surplus in American history. For the first time in 40 years, we will have a budget surplus for two years in a row.

- **Seven Years of Fiscal Improvement.** Reaching a surplus in 1999 will mark the seventh consecutive year of improved fiscal balance -- the longest period of improvement in all of American history.

- **Expanding Critical Investments in the Future Including Education And Training.** President Clinton's 1993 Economic Plan included $255 billion in spending cuts over five years; however, as spending has been cut in lower priority areas, President Clinton has dramatically increased funding in critical areas, such as education and training, children, the environment, health care, and research and development.

- **Providing Tax Relief for Middle-Income Families.** Tax cuts for working families signed into law by President Clinton have the typical American family of four facing their lowest federal tax burden in over two decades. President Clinton proposes to build on this record to provide additional targeted, paid-for tax relief for child care, education, pensions, affordable housing, and the environment.

THE BUDGET IS IN SURPLUS, NOW WE MUST SAVE SOCIAL SECURITY. President Clinton is committed to taking advantage of this historic opportunity to save Social Security for the 21st century. We must act now to tackle this tough, long-term challenge and President Clinton believes that we must do it in a way that maintains universality and fairness, ensures that Social Security continues to provide a benefit people can count on, protects low-income and disabled beneficiaries, and maintains our fiscal discipline.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 17:45:22.00

SUBJECT: Discussion w/ Appuzzo

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
I talked to Virginia Appuzzo. She said that she would try to get $43,000 (which is the entire CEA cost of the OECD trips that used to be funded by State) restored back from the $70,000 cut. She didn't sound like she was going to work to try to get any more than that. But it's better than nothing.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Steven N. Braun (CN=Steven N. Braun/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 17:14:52.00

SUBJECT: Light MV sales in 1998

TO: Rebecca M. Blank (CN=Rebecca M. Blank/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Michael Waldman (CN=Michael Waldman/OU=WHO/O=EOP @ EOP [WHO])
READ:UNKNOWN

CC: Jonathan Orszag (CN=Jonathan Orszag/OU=OPD/O=EOP @ EOP [OPD])
READ:UNKNOWN

TEXT:
December MV sales (reported this afternoon) were 17.28 million units at an annual rate--a surprisingly strong finish to a good year. Total light vehicle sales for the year as a whole was 15.45 million units, the highest sales since 1986 and the second highest ever.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 11:04:35.00

SUBJECT: our intl. mtg. this p.m.

TO: Nouriel Roubini (CN=Nouriel Roubini/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Matthew R. McBrady (CN=Matthew R. McBrady/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Agenda for our mtg.

ERP
Chapter 7 (most important) Reconciling reader
intelligibility
and Treasury sensitivities.
Chapter 6 Under control.

Steel update
Thursday NEC principals mtg.
their agenda: "Fast track, WTO Round, Asia Project 5" (what's
that?)
Other quick updates?

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 18:13:51.00

SUBJECT: Press interviews

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Joe Robello of Dow Jones would like to come in and interview about the outlook for the US economy. Can I put this on your schedule? Also, Bob Davis of the WSJ wants to talk to you about social security. Would you be willing to talk to him?

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Ryan D. Edwards (CN=Ryan D. Edwards/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 09:24:09.00

SUBJECT: Re: OECD timetable

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Sounds good! Let me know if you'd like me to arrange a meeting time;
otherwise I'll wait to hear from you.

Best,

-Ryan

Janet L. Yellen
01/06/99 09:21:30 AM
Record Type: Record

To: Ryan D. Edwards/CEA/EOP
cc:
Subject: Re: OECD timetable

I think Doug should attend with Steve. Let's have a brief meeting with
Doug, Becky and Steve and make sure this plan is alright with them.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 21:00:29.00

SUBJECT: Re: Discussion w/ Appuzzo

TO: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
I think that's a reasonable solution.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 6-JAN-1999 11:17:22.00

SUBJECT: Chapter of the Budget

TO: Douglas W. Elmendorf (CN=Douglas W. Elmendorf/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Charles F. Stone (CN=Charles F. Stone/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Steven N. Braun (CN=Steven N. Braun/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Rebecca M. Blank (CN=Rebecca M. Blank/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
As you know, a draft of Chapter 3 of the budget has been circulated to the CEA. Comments are due tomorrow. So, please give your comments to Alice by tomorrow morning and then she will be sure that they get to the appropriate person at OMB.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 7-JAN-1999 12:07:16.00

SUBJECT: Robert Lawerence

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
I talked to Charles Duncan in Presidential Personnel. He said that Lawerence's papers are still w/ WH Counsel. He is going to call and check on status. But, he said that things like nominations have been held up given that many in WH Counsel have been pulled on to other things.
If Charles finds that WH Counsel is not done, I would suggest that we get permission to announce "an intent to nominate." That way Lawerence can begin telling people and you can announce it to the staff. Does that sound like a good plan?
Michele

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 7-JAN-1999 09:32:55.00

SUBJECT: Call from Appuzzo

TO: Mary Fibich (CN=Mary Fibich/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Virginia Appuzzo called to say that she spoke w/ OMB and that they are
going to restore the $43,000 to the CEA budget.

Withdrawal/Redaction Marker
Clinton Library

DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
001. email	Janet L. Yellen to smwilson at 18:23:52.00. Subject: Hi. (1 page)	01/07/1999	Personal Misfile

COLLECTION:

Clinton Presidential Records
Automated Records Management System [Email]
CEA ([Yellen])
OA/Box Number: 950000

FOLDER TITLE:

[01/05/1999 - 01/11/1999]

2013-0723-F
ab1290

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P1 National Security Classified Information [(a)(1) of the PRA]
P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P3 Release would violate a Federal statute [(a)(3) of the PRA]
P4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [a)(5) of the PRA]
P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.
PRM. Personal record misfile defined in accordance with 44 U.S.C. 2201(3).
RR. Document will be reviewed upon request.

Freedom of Information Act - [5 U.S.C. 552(b)]

b(1) National security classified information [(b)(1) of the FOIA]
b(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
b(3) Release would violate a Federal statute [(b)(3) of the FOIA]
b(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
b(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
b(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
b(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Mary Fibich (CN=Mary Fibich/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 7-JAN-1999 11:54:41.00

SUBJECT: Re: Call from Appuzzo

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Michele Jolin (CN=Michele Jolin/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Thanks, Michele.

Financial Management now needs to lock in the new numbers. They need an okay from CEA on where to cut the remaining $27,000 from our budget request. I suggested the following, pending concurrence from you two. Would you prefer something different?

($25,000) - Special Personal Services (for IPAs and detailees)
(2,000) - Personnel Compensation

These numbers lock in the MAX system cob tomorrow, and Financial Management will no longer have access to the system to enter any changes so they need to know fairly soon.

Janet,
Re: the question you asked me yesterday about whether we had received our passback from OMB prior to this. I verified with Financial Managment that some weeks ago (they estimate 4 or more weeks ago). they received a phone call from OMB that they should "consider this our passback number." That number being the number in our budget request for FY 2000.

-- Cathy

Michele Jolin
01/07/99 09:31:45 AM

Record Type: Record

To: Janet L. Yellen/CEA/EOP, Mary Fibich/CEA/EOP
cc:
Subject: Call from Appuzzo

Virginia Appuzzo called to say that she spoke w/ OMB and that they are going to restore the $43,000 to the CEA budget.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 7-JAN-1999 17:32:21.00

SUBJECT: Letters of Recommendatiion

TO: Alice H. Williams (CN=Alice H. Williams/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Attached are two letters of recommendation for Victoria Greenfield. Could
you format these for my signature? Many thanks.=================== ATTACHMENT 1
===================
ATT CREATION TIME/DATE: 0 00:00:00.00

TEXT:
Unable to convert ARMS_EXT:[ATTACH.D48]MAIL43315180W.036 to ASCII,
The following is a HEX DUMP:

January 5, 1998

Search Committee Chair
MSN 3G4
George Mason University
4400 University Drive
Fairfax, VA 22030

Dear Sir:

The purpose of this letter is to recommend Victoria Greenfield for a tenure track position at George Mason University. Victoria's substantial record of accomplishment clearly reveals her capacity to produce high quality, well focused and carefully executed research. The breadth of Victoria's experience, at the Congressional Budget Office and the State Department, in areas ranging from narcotics to NAFTA and civil aviation to climate change, demonstrate her ability to apply analytical tools and rigorous methods of data analysis to a wide range of public policy issues. In addition to being extraordinarily bright, Victoria is also independent-minded, highly motivated, and extremely collegial. She has the potential to become a first rate researcher, an effective teacher and a solid contributor to your department.

My staff and I have worked very closely with Victoria over the last year and a half in a wide variety of National Economic Council-convened interagency processes relating to economic policy issues requiring Presidential decisions. We have all been thoroughly impressed by Victoria's analytic skills, her talent for bringing good economic analysis to bear in a policy setting, her mature good judgment concerning the design of sensible public policies, and her effectiveness in interagency debate. As Chief International Economist at the State Department, Victoria advises Under-Secretary of State Stuart Eizenstat and Assistant Secretary Alan Larson on a wide variety of economic issues, particularly in the areas of international trade and investment and global climate change. The Council of Economic Advisers is involved in these same discussions and typically, State and CEA share similar policy perspectives. CEA economists and members have therefore worked collaboratively with Victoria in drafting economic analyses and policy memoranda in a number of different areas. For example, CEA senior economists worked closely with Victoria on the negotiations leading to the U.S.-Japan Civil Aviation agreement, producing an economic analysis of the agreement demonstrating the likely benefits from increased competition in the market for air travel and estimates of the gains to U.S. consumers. This analysis was particularly well-executed with potential to result in refereed publications.

Over the last year and a half, numerous CEA staff, as well Jeff Frankel and I, have collaborated with Victoria in a broad agenda of work relating to global climate change. The initial purpose of this work program, during the period leading up to the Kyoto Conference, was to provide advice to the President and the climate change negotiating team, headed by Victoria's boss, Stuart Eizenstat, on an appropriate U.S. strategy for dealing with an extremely difficult but critical environmental issue. One of the first and most important decisions related to the U.S. position on targets and timetables for reducing greenhouse gas emissions. Victoria worked with CEA to produce incisive economic analysis of this issue to inform the President's decision making. She quickly developed considerable expertise in, what was for her, a new and technically demanding area of analysis. During the negotiations in Kyoto, in which Victoria served as an adviser to Under Secretary Eizenstat, she worked with our staff to provide economic analysis of proposals relating to caps on emissions trades, the possible inclusion of an escape clause in the Protocol, restrictions on trading relating to particular country-bloc groupings, alternative options for the involvement of developing countries in the trading system, and implications of the inclusion of sinks and synthetic gases in the specification of emissions targets. As in the case of her work on civil aviation, Victoria's analytical work on climate change and the expertise she has developed may potentially lead to an ongoing program of research and publications.

Since the conclusion of the Kyoto negotiations, Victoria has participated in further work in the area of climate change, performing analysis relating to key design issues in the operation of an international emissions trading systems. In addition, she has worked with CEA to prepare economic analysis designed to guide the Administration's negotiations with developing countries considering the voluntary adoption of emissions targets. For these countries, the key analytic question is how to designate an emissions growth target that is neither so lax that it fails to provide environmental benefits to the global community nor so tight that it impinges unduly on economic growth. Victoria has participated in ongoing U.S. bilateral negotiations with developing countries concerning emissions trading and the adoption of voluntary targets and she accompanied me to Korea for exploratory negotiations on this topic. The analysis that she helped to develop for these consultations was of the highest quality, combining both solid economic analysis and an appreciation of the difficult political and public policy issues involved in this critical environmental area. Last fall Victoria again served as adviser to Stu Eizenstat, head of the U.S. negotiating team, at the Buenos Aires Climate Change negotiations.

In her broad-ranging work at the State Department, Victoria has brought intelligence, analytic talent, rigorous economic training, a pragmatic sense of policy design, and an unusual ability to articulate and defend positions both in writing and orally. She works extremely well in team situations and is highly valued as a colleague. I believe that the same qualities that have made Victoria a success in her very demanding job at the State Department equip her to pursue a successful academic career. I expect her to be an extraordinarily effective and popular teacher and a productive researcher. I recommend her highly for an assistant professorship in your department.

Sincerely,

January 5, 1998

Dr. Natalie Webb
1522 Cunningham Road, Rm 106
Naval Postgraduate School
Monterey, CA 93943

Dear Sir:

The purpose of this letter is to recommend Victoria Greenfield for an assistant professorship at the Naval Postgraduate School. Victoria's substantial record of accomplishment clearly reveal her capacity to produce high quality, well focused and carefully executed research. The breadth of Victoria's experience, at the Congressional Budget Office and the State Department, in areas ranging from narcotics to NAFTA and civil aviation to climate change, demonstrate her ability to apply analytical tools and rigorous methods of data analysis to a wide range of public policy issues. In addition to being extraordinarily bright, Victoria is also independent-minded, highly motivated, and extremely collegial. She has the potential to become a first rate researcher, an effective teacher and a solid contributor to your department.

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In her broad-ranging work at the State Department, Victoria has brought intelligence, analytic talent, rigorous economic training, a pragmatic sense of policy design, and an unusual ability to articulate and defend positions both in writing and orally. She works extremely well in team situations and is highly valued as a colleague. I believe that the same qualities that have made Victoria a success in her very demanding job at the State Department equip her to pursue a successful academic career. I expect her to be an extraordinarily effective and popular teacher and a productive researcher. I recommend her highly for an assistant professorship in your department.

Sincerely,

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 7-JAN-1999 14:56:56.00

SUBJECT: Detroit Economic Club speech draft -- comments asap

TO: Steven N. Braun (CN=Steven N. Braun/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Robert F. Schoeni (CN=Robert F. Schoeni/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Charles F. Stone (CN=Charles F. Stone/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Could you look at this and see if you have any comments?
---------------------- Forwarded by Janet L. Yellen/CEA/EOP on 01/07/99
02:55 PM ---------------------------

Michael Waldman
01/07/99 01:32:36 PM
Record Type: Record

To: See the distribution list at the bottom of this message
cc:
Subject: Detroit Economic Club speech draft -- comments asap

NOTE -- THIS SPEECH IS NOW A 20 MINUTE SPEECH. I THINK THAT LENGTH IS APPROPRIATE FOR THIS SETTING. IF NEED BE WE CAN SHRINK IT, BUT I RECOMMEND AGAINST THAT. MW

Draft 01/07/99 1:15pm
Waldman/Shesol

PRESIDENT WILLIAM J. CLINTON
REMARKS TO THE ECONOMIC CLUB OF DETROIT
DETROIT, MICHIGAN
January 8, 1999

Acknowledgments: Mayor Dennis Archer; William Halling, President, Economic Club of Detroit; members of Congress TBD

It,s a pleasure to be back here in Detroit. As you know, I like to point out that 1998 was the warmest year on record. And, based on my projections from the last few days, 1999 will be the coldest.

It was here in Detroit, in our industrial heartland, that workers and managers built the great economic engine of this American Century -- and generated the great American middle class. Today I want to talk to you about what we are doing) and must continue to do -- to build the economic engine of the next American Century, the 21st Century, and fuel the expansion of the middle class for a new millennium.

It was here in Detroit, nearly a century ago, that Henry Ford set in motion that very first assembly line -- building not only the Model T but a new model for doing business. He said he was looking for leaders and thinkers and workers with &an infinite capacity to not know what can,t be done.8 People like that came together in Detroit, and across America, forging the transition from farm to factory. Detroit led the way -- and America led the world.

Detroit still leads the way. America continues to lead the world. Indeed, we gather today at a time of American economic renaissance. Our budget is balanced, for the first time in a generation, and we are now entering the second year of an era of surpluses. This week, I announced that our economists project we will close out the year 1999 -- and the 20th Century -- with a surplus of no less than $76 billion. Like this year,s, it will be the largest in the history of the United States. And today, we received more evidence that our economic strategy is working: [unemployment numbers TK].

It,s now official: I can announce today that our peacetime economic expansion is now the longest in history. And this time, the expansion is different than those some of those that came before. This time, our prosperity belongs to the many, not merely to the few. This time, a rising tide truly does lift all boats.

This is not only the longest peacetime expansion in history; it is the wide, and deep. The longer it goes, the more businesses reach out to find new talent, and give their workers new skills to master new techniques. All income groups, from the richest to the poorest, have seen their incomes rise since 1993. The typical family income is up $3,500 during the same period, adjusted for inflation. We have seen big gains for African-American and Hispanic households, who were left behind during the last expansion. This is an inclusive expansion.

Think of how far we have all come. I will never forget the last time I spoke here, just seven years ago, when it seemed America had lost its way. We were facing new challenges, walking into strong headwinds of economic change, and we failed to move forward; we stalled; we stumbled. When I spoke to the Economic Club in August 1992, I said we had a choice to make: &to create a high-growth, smart-work, high-wage economy, or . . . to continue to drift into a low-growth, hard-work, low-wage future.8

In August 1992 the unemployment rate for the Detroit area was 8.8 percent, and the same in the state as a whole. In August 1992, Michigan had lost more than 90,000 manufacturing jobs in the previous six years. In August 1992, businesses were folding, residents were losing jobs and hope, crime and poverty were hitting record levels. The new world of high technology, of greater global competition, threatened to pass our heartland by. Foreign competitors described America as just another great power in a state of inevitable, irreversible decline. On our own bestseller lists was a book that asked the question: &America, what went wrong?8

When I took office several months later I said: &there is nothing wrong with America that can,t be cured by what is right with America.8 And today, we ask with pride: &America, what went right?8

The answer is a lot of things -- in fact, most things -- are going right for America. We have created a new economy -- with 17 million new jobs, wages rising at twice the rate of inflation, the highest home ownership ever, and unemployment and inflation at their lowest levels in a quarter century.

And closer to home for many of you, we learned this week what a remarkable year 1998 was for U.S. automakers: 15.6 million cars and light trucks sold last year, the most in 12 years and the third greatest number ever. Ford had its best year since 1978, and sales of the former Chrysler Corporation brands hit a record high: 2.5 million vehicles.

How did all this happen? It was not inevitable. It was certainly no accident. It demanded of us a new economic vision, a new philosophy of how to make our economy work for our people. It required a rejection of the old, contentious debates between left and right, Democrats and Republicans, that had paralyzed our politics for too long. Last May at the Economic Club, you heard about our economic strategy from Vice President Gore, who has played such a vital role these six years in making it a success.

We said in 1992 and we have said many times since: No nation can resist the strong currents of economic change. No nation can stem those powerful tides. And no nation should simply leave its people to sink or swim. Instead, we determined to channel the currents of change, energizing the world, riding those tides to greater heights.

To make this happen we needed a different kind of government -- progressive and creative, flexible and attuned to the information age. And smaller. In fact, today we have the smallest government since John Glenn first orbited the Earth. We also wanted to end the war between business and government. Not by regulatory fiat, not by command and control, but by challenging the private sector to meet our national goals and giving them the flexibility to do so. We have cut, for example, more than 16,000 pages of federal regulations, and streamlined or simplified 31,000 more. [best e.g. of incentive based regulation]

We called this way of thinking the &Third Way.8 In my own party, its advocates were known as &New Democrats.8 Today, this philosophy has found rhetorical support, at least, among a growing number of Republicans. And it has modernized progressive political parties and brought them to power all through the industrial world. We have created, across old lines of division, a new American consensus -- making the &vital center8 once again a place of vigorous action. That is the only way for an advanced industrial nation to thrive in the new global economy.

Our new economic strategy was rooted, first, in fiscal discipline. In an era of worldwide capital markets, no longer can any nation purchase prosperity on the cheap by running big deficits. We cut the deficit; we balanced the budget. And by doing so, by making the hard choices required of us, we sent interest rates down -- helping more young people to buy homes, helping more entrepreneurs to start businesses. We also freed up more than $1 trillion in capital for private-sector investment. Unlike past expansions, where government bought more and spent more to drive the economy, during this expansion government spending as a share of the economy actually has fallen. America,s economic success has been fueled by the biggest boom in private sector investment in decades.

The second part of our strategy has been to invest in our people. In 1992 I said that there were two kinds of deficits -- not just the budget gap but also an investment gap. A high-tech economy places ever greater demands on skills. That is why we are continuing to make critical investments in our people and our future:

Even as we have balanced the budget, we have nearly doubled our annual investment in education and training.

Even as we closed the budget gap, we have expanded the Earned Income Tax Credit for 15 million low-income working families, giving them hope and helping lift them out of poverty.

Even as we cut government spending, we have raised investments in a welfare-to-work jobs initiative and invested $24 billion in our children,s health initiative.

Third, building a new American economy has meant making the world economy work for us. Fully one third of the strong economic growth America has enjoyed in the 1990s came from trade. For every country engaged in trade, for every market open to our exports, the base of customers for American goods and services expands dramatically. That is why it matters to all Americans that we signed more than [240] trade agreements during the past 6 years. [In 1995, we signed an auto trade agreement with Japan. We have made some progress since then. But with Japan,s economy under duress, we will never make the kind of progress we intended to make, and the progress that you know we should make. And that is why we have pressed the Japanese government to take the steps necessary to stimulate their economy and reform their banking system -- so that the Japanese people can have the benefits of buying Detroit,s automobiles.]

We have created a truly new, global, high-tech economy. Today, more than 4 million Americans work in technology-related industries, earning 70 percent above average incomes. Technology has not just built the computer industry but has transformed existing industries: high-tech research and development is remaking real estate, construction, and, as I have seen today, transportation. I used to think there was nothing I would rather drive than my old Ford Mustang, but I might reconsider after what I saw this morning at the Auto Show. Consider this: The Ford Taurus Americans drive to the supermarket today has more computer power than Neil Armstrong had to steer Apollo 11 to the Moon. It,s an interesting time.

In all this, the economy that once seemed anemic is now robust, a leader for growth in the world. But common sense, experience, and the example of our competitors abroad show us the perils of resting on our laurels. Now, as ever, is the time to press ahead. Now, at this moment of great plenty, is precisely the time to face the challenges of the 21st Century.

Even as we bask in our historic economic expansion, we must do more to stabilize the world economy, to spur growth, and to spread more widely its benefits.

First, in the next year and beyond, we must remain vigilant and maintain our hard-won fiscal discipline. That means one thing, and let me state it plainly: that means no tax cuts, and no spending programs, no matter how attractive, that would put our prosperity at risk. I will say again what I have said before: in this new year and in this new Congress, I will veto any tax plan that imperils our fiscal discipline.

Our fiscal responsibility gives us an unparalleled opportunity to address the challenge of an aging nation. Soon the number of elderly Americans will double, a seismic demographic shift with great consequences for our nation. I am glad the Congress set aside the surplus until we saved Social Security -- now, it,s time to actually do it, and to save Social Security for the 21st Century. We must, also, honor the great legacy of Rep. Dingell,s father, who fought for Medicare for so many decades, by strengthening and securing that program into the new Century.

Second, we must do more to invest in our people. Today the income gap is above all a skills gap. In my upcoming State of the Union Address, I will advance a new training agenda to give the American people the skills they need to compete in the growing global economy.

Third, at this time of continued turmoil in the international economy, we must do more to make the world economy work for our people.

I want to press forward with open trade. It would be a terrible mistake, at this time of economic fragility in so many regions, for the United States to build new walls of protectionism, that could set off a chain reaction around the world, imperiling the growth upon which we depend. At the same time, we must do more to make sure that working people are lifted up by trade. We must do more to ensure that spirited economic competition among nations never becomes a race to the bottom -- in environmental protections, consumer protections, or labor standards. We should be leveling up, not leveling down.

Strengthening the foundations of trade means strengthening the architecture of international finance. The United States must continue to lead in stabilizing the world financial system. When the nations of Asia descend into economic disruption, consigning an entire generation to poverty, it hurts them and it hurts us. These nations are our trading partners; they buy our products and can ship low-cost products to American consumers. In September, at the Council on Foreign Relations, I set out a strategy to constain financial contagion before it spreads.

I am pleased that our approach has been taken up around the world: interest rates are being cut here and abroad, America is meeting its obligations to the International Monetary Fund, there is a new facility at the World Bank to strengthen the social safety net in Asia. And there is now a new precautionary line of credit so nations with strong economic policies can quickly get the help they need -- before financial problems mushroom from concerns to crises to calamities.

Fourth, we must do more to renew our cities. My administration has pursued a new urban strategy, based on empowerment and investment, and here in Detroit we see its success. With the critical assistance of our Empowerment Zone, the unemployment rate here has been cut in half. But we have more work to do to bring the spark of private enterprise to neighborhoods that have too long been without hope. Next week, at the Wall Street Project convened by Reverend Jackson, I will talk about how we can find growth from emerging markets within our own cities and rural communities.

Finally, we must do more to protect the environment while promoting economic growth. As Vice President Gore pointed out last May, here at the Economic Club, we can indeed pursue greater growth while having cleaner air and cleaner water, and while tackling challenges like global climate change. Our administration has worked closely with auto makers as we face the challenge of climate change. That is the idea behind the PNGV, the Partnership for a New Generation of Vehicles that we started six years ago, the government joining forces with auto makers to develop cleaner, more fuel-efficient cars and to make American car companies even more competitive in global markets. I was pleased to see some of the fruits of that partnership at the Auto Show today, and I,m looking forward to seeing the first Concept Cars from each of the companies in about a year,s time.

Henry Ford said it best: &Coming together is a beginning; keeping together is progress; working together is a success.8 At the turn of the last century, Ford spoke with all the optimism and ambition of a young man and a young nation. The innovators and business leaders of his generation knew they would succeed; they marched boldly through the doors of opportunity and helped shape a new nation. Now, on the verge of another American Century, our economy is at pinnacle of power and success. Will America have the courage to move forward? I believe we will. Will we renew our ideas and institutions to meet new challenges? I believe we will. I am every bit as confident as Henry Ford that &working together is success,8 and that there are no limits to the world we can create, together, in the century to come. Thank you.

Message Sent
To:____

Melissa G. Green/OPD/EOP
Peter A. Weissman/OPD/EOP
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RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 8-JAN-1999 16:25:00.00

SUBJECT:

TO: Charles F. Stone (CN=Charles F. Stone/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
=================== ATTACHMENT 1 ===================
ATT CREATION TIME/DATE: 0 00:00:00.00

TEXT:
Unable to convert ARMS_EXT:[ATTACH.D72]MAIL44345390N.036 to ASCII,
The following is a HEX DUMP:

Remarks of Janet L. Yellen

Chair, Council of Economic Advisers

to Macroeconomic Advisers' Washington Policy Symposium

September 10, 1998

It's a pleasure to join you today. A predecessor of mine on the Council of Economic Advisers warned me that on many days CEA members feel like those little steel balls in pinball machines--bouncing back and forth from one short deadline project to the next, forced to switch directions rapidly and with little warning. I understand what he meant. Crises requiring immediate attention are rarely in short supply.

Even so, a substantial portion of the Administration's economic agenda relates to longer term issues that will be critical to the performance of the U.S. and world economies not next week or next year but instead decades or even further in the future. We have had the luxury of elevating the priority of these longer term issues because the fundamentals of the U.S. economy are extremely sound. This assessment, offered repeatedly by the President and other Administration officials, remains accurate, in my view, in spite of our increasing vulnerability to repercussions from the current international financial crisis. Obviously, we have not escaped the effects of the Asian crisis. It has taken a toll on U.S. exports, which, according to our estimates, are down about $30 billion at an annual rate, as a direct result. It is causing losses at major financial institutions with emerging market exposure. And it is clearly contributing to volatility in our own financial markets. A widening or deepening of the crisis remains the single greatest threat to the continued expansion of the U.S. economy. The Administration is intensely focused on the need to restore growth to the world economy and stability to the world's financial system.

That said, the American economy has been and still is enjoying its best performance in decades, with unemployment and inflation at the lowest levels in a generation, a rate of national saving which is double what it was six years ago, real wage growth which has recently been the highest in two decades, and, importantly, a federal budget which is in surplus this year after three decades of deficits. As my colleague Joe Minarik undoubtedly emphasized this morning, if we maintain the fiscal discipline now in place, budget surpluses over the next decade are projected to exceed $1.5 trillion under both CBO and OMB (MSR) assumptions. It is in good economic times like these, that we have the luxury and the resources to anticipate problems ahead and prepare for them. Moreover, the cost of addressing longer term problems is usually lower when one has the foresight and discipline to act early than if one procrastinates.

Three of the central issues on our longer term economic agenda are the development of policies to reduce the risk of future crises in the international financial system, namely the design of a new financial architecture; measures to address the consequences of global climate change; and Social Security reform. Seeing that your agenda for this conference includes discussion of the first two of these topics, I thought I might most usefully focus on the third--Social Security reform--in my remarks today. My objective is to describe the problem we face, the President's principles for evaluating reform options, and some of the difficult tradeoffs that must be faced in devising a reform.

In his State of the Union address, the President proposed to "Save Social Security First" by reserving every penny of the surplus until we have agreed on a plan to secure the financial viability of Social Security. To accomplish this task, the President proposed a process of public education and debate followed by the forging of a bipartisan agreement. He and the

Vice-President have participated over the last five months in a number Social Security fora, whose purpose has been to afford Americans the opportunity to better understand the problems facing the Social Security system and to explore alternative solutions to these problems. This process of public discussion will culminate with a White House conference in December. The plan is to then begin bipartisan negotiations with Congressional leaders in January 1999 to devise a comprehensive plan to strengthen Social Security.

I think it is fair to say that the President's proposal to Save Social Security First has been enormously popular--so much so that there exists strong bipartisan support for tackling reform. Certainly, the Administration remains committed to its pledge to leave every penny of the surplus intact until reforms are enacted. The President's budget proposed new initiatives in a number of key areas, including child care, education, the environment and health care, but all of the proposed initiatives were paid for so that they would not deplete projected surpluses.

It should come as no surprise that Americans are eager to fix Social Security, because it is an extremely successful social program. For almost 60 years, Social Security has provided Americans with income security in retirement and protection against loss of family income due to disability or death. Social Security retirement benefits are indexed for inflation and provide a lifetime annuity--a package which is difficult if not impossible to obtain in private markets. In fact, less than half of all individuals aged 65 and older received any private pension benefits in 1994. As a result, Social Security benefits are the largest source of income for 2/3 of those in this age group and the only source of income for 18 percent of them. The system has enjoyed dramatic success in reducing the poverty rate among retirees, helping to lower the elderly poverty rate from 35 percent in 1959 to 11 percent in 1996. Social Security is also more than just a pension plan: It is a family protection plan, and nearly 1 in 3 beneficiaries are not retirees. For the average wage earner who dies and leaves a spouse and two children, Social Security provides survivors benefits equivalent to a $300,000 life insurance policy; one in six 20 year olds will die before retirement age. Social Security also provides disability protection, and 3 in 10 20 year olds will become disabled for some period before retirement.

The most commonly used yardstick to measure the financial soundness of the Social Security system is the 75-year actuarial balance. The Social Security actuaries now project that the current balance in the Trust Fund together with projected revenues over the next 75 years will be insufficient to fund the benefits promised under current law. By 2013, payroll contributions are expected to fall short of benefits; by 2021 the shortfall is expected to exceed Trust Fund interest earnings, so the Trust Fund will begin to decline; and by 2032, the Trust Fund is expected to be depleted, after which time contributions would still be sufficient to pay about 75 percent of current law benefits. Of course, future taxes and benefits depend on a variety of economic and demographic factors that cannot be predicted perfectly, so the actual problem may be smaller or larger than we now believe. Nevertheless, the intermediate projections of the actuaries imply that the imbalance in the Old Age, Survivors' and Disability Insurance program over the next 75 years amounts to around 2-1/4 percent of taxable payroll, or about 1 percent of GDP. That is the most common way to scale the current problem. As the CEA noted, however, in its 1997 Economic Report, the 75-year actuarial balance actually understates the financial imbalance over the very long term because the actuaries' projections show surpluses in the early years of the 75 year horizon and growing deficits later on when demographic forces have their full effect.

Although Social Security faces a financial imbalance, poll results suggest that the magnitude of the problem has been exaggerated in the minds of many who report that they doubt that Social Security will be there for them at all. In fact, although the seriousness of the financial imbalance facing Social Security should not be downplayed, its magnitude is not so large as to be insurmountable, particularly if early action is taken. This is a solvable problem, and many ideas have been and will be put on the table to address it.

The President has emphasized that at this stage in the national debate he remains open-minded and committed to giving every option a fair hearing. It is far too early to prejudge the outcome of the debate. However, the President has set forth five principles to guide the reform process, reflecting his judgement about the appropriate goals for reform. His first principle is to strengthen and protect Social Security for the 21st century. This is an overriding goal, and it warns against proposals that fail to provide a comprehensive solution to the solvency problem. For example, a proposal that simply diverts existing payroll taxes into a new system of individual accounts would not qualify as a comprehensive solution because it reduces Social Security's revenues and makes the existing imbalance even larger. However, several comprehensive proposals have been advanced that include such individual account carve-outs.

A second principle for Social Security reform is to maintain fiscal discipline--to insure that surpluses are not drained before addressing Social Security reform, and that fiscal policy plays a helpful role in preparing for the retirement of the baby boomers. The key factors contributing to the projected Social Security imbalance are improvements in life expectancy and a reduction in birth rates, which have put us on a path of rapid declines in the number of employed workers for every retired American. When the Social Security Act was passed in

1935, the life expectancy of a 65 year old American was about 13 years. Today, life expectancy for a 65 year old is 18 years and rising. At the same time, people are retiring earlier. In 1950, the average age for first receiving Social Security retirement benefits was 68; today it's 63. As a consequence of these changes, the ratio of employed workers to retirees has fallen from about 5 to 1 in 1960 to 3-1/2 to 1 today. In only 30 years time, it will be just 2 to 1 and still falling.

In addition to the aforementioned effects on OASDI, this demographic transition will have important effects on the Medicare and Medicaid programs as well as on the economic environment outside the government. For the nation as a whole, the central problem is to provide a high standard of living for both workers and retirees even though a smaller share of the population will be in the workforce. A natural solution is to make workers more productive by increasing investment in both physical and human capital, which will, in turn, raise labor productivity. In doing so, we can boost the size of the total economic pie, which is the prerequisite to meeting the retirement costs of the baby boom generation without unduly burdening future workers. The key to accomplishing this is to increase national saving, a goal to which continued fiscal discipline would contribute.

National saving increased from 3.4 percent of net national product in 1992 to 7.6 percent in the first half of 1998, but the improvement is accounted for entirely by the elimination of the federal budget deficit, as private saving actually declined relative to total output. If the projected budget surpluses are saved, they will add to national saving; moreover, $130 billion of surplus placed in the Trust Fund and invested in government bonds would extend the expiration date of the Trust Fund by roughly a year or reduce the taxable payroll gap by about 0.1. National saving could also increase if the surpluses are used to fund individual accounts and such accounts add to private saving. But if the surpluses are dissipated, they will neither help to strengthen Social Security nor add to national saving.

The President listed three other principles to guide Social Security reform. One principle is to maintain universality and fairness. The current program provides benefits on a progressive basis, and ensuring progressivity is an important standard by which reform proposals should be judged. Another principle is to provide a benefit that people can count on--a secure base for retirement planning. I will come back to this principle of retirement income security when I discuss some prominent reform proposals. Finally, the President has said that we must preserve financial security for low-income and disabled beneficiaries, which highlights his commitment to preserving the disability and survivors' insurance aspects of the OASDI program.

The President's principles will provide a framework for Social Security reform, but they do not precisely determine its outcome. Even within this framework, the President and the Congress will face some difficult choices in the coming months. I would like to discuss some of the issues and tradeoffs that will be important. Of course, I am not going to endorse specific reform ideas at this time, because the President has made it clear that he does not want to prejudge the public debate or hinder bipartisan consideration of alternative proposals.

One overriding question is whether to stick with the pure defined-benefit structure of Social Security or to move at least partly in the direction of a defined-contribution structure with individual accounts. Some people argue that individual accounts could earn a higher rate of return than the Trust Fund can, pointing to the difference between returns on average private portfolios and projected rates of return on Social Security. But this comparison is misleading in at least two crucial ways.

First, most of today's payroll tax goes to current beneficiaries. If current workers put their payroll tax contributions into individual accounts for their own retirements, we would need to find some other way to pay current benefits. Put differently, the Social Security system paid benefits to some past generations of retirees that greatly exceeded their contributions. This policy created an implicit debt that must be paid somehow by current and future generations, and a Social Security system which does that will necessarily generate a lower return than a new system that does not have that accumulated burden. This is often referred to as the "transition problem." Surpluses in the unified budget--used either to augment the Trust Fund or to fund individual accounts--could at least partially mitigate the transition problem, by bringing additional funds into the Social Security system.

The second way that comparing rates of return between average private portfolios and Social Security is misleading is that most private portfolios invest in riskier assets than does the Social Security Trust Fund. These riskier assets--equities in particular--have paid higher returns than government bonds over nearly all long periods of time in the United States during the past century. Between, for example, 1959 and 1996, the S&P 500 returned an average 3.84 percent more per year than bonds in the Trust Fund. There is no guarantee, however, that the equity premium in the future will match its historical average. And equity investments involve substantial risk over shorter time periods. For example, on three occasions during the past 70 years, the S&P 500 index has declined more than 35 percent over two years, while Japan's Nikkei index has fallen over 60 percent since 1989. Moreover, some analysts have questioned whether investing Social Security funds in equities--through either the Trust Fund or individual accounts--would have positive effects on saving or rates of return for the nation as a whole. If such investments merely represented a swap of bonds for equities, there would be a corresponding swap of equities for bonds in private portfolios. If the total supplies of equities and bonds were unchanged, this exchange would raise the return earned on Social Security contributions but reduce the return earned on people's other retirement savings.

Of course, knowledgeable proponents of individual accounts understand these points and favor establishing such accounts for other reasons. Some supporters of individual accounts believe that national saving can be increased more effectively by moving funds out of the government and into private hands. They doubt that the government has the will to renounce the use of growing annual surpluses in the Social Security system. Some also argue that for many Americans without private retirement accounts, individual accounts established by the government could, through a demonstration effect, stimulate additional private saving. However, under current budget projections, individual accounts could not be funded out of the surplus forever, so a permanent commitment to their funding could set the stage for future fiscal deficits.

Many supporters of individual accounts believe that it is important to allow individuals to choose the portfolio allocation of their Social Security contributions. One justification that is offered for this view is that people should be able to decide for themselves how much risk they want to bear. However, at the same time, some supporters of individual accounts want the government to restrict people's investment options to reduce their risk, or they want the government to guarantee some minimum level of benefits while allowing scope for equity investments. Balancing flexibility against protection is a difficult problem.

Another justification that is given for allowing individuals to choose portfolio allocations is to minimize government involvement in financial markets. Supporters of an "equities in the Trust Fund" approach argue that it can achieve the same objective as individual accounts with lower administrative cost and greater sharing of the risks of market fluctuations both within and across generations. I think it is an open question, though, whether institutions could be designed that would allow the Trust Fund to purchase equities but still ensure that the government did not gain too much influence over the economy. Depending on the share of the Trust Fund invested in equities, the Social Security system could end up holding a substantial fraction of the stock market. Could the government avoid the pressure to make investment decisions for purposes other than maximizing the rate of return while minimizing risk? How would stock proxies be voted?

In the Federal Thrift Savings Plan, governance issues have been handled successfully by insulating investment managers from political calculations, narrowly defining their goals, and permitting investment only in index funds. However, the Thrift Savings Plan involves far less money than Social Security does, and it is essentially a collection of individual accounts managed by the government rather than a government-owned Trust Fund. In considering these governance issues, we may benefit from studying the experience of other countries engaged in similar reform efforts. For example, the Canadian Pension Plan will begin investing in private securities in early 1999. Equity purchases will be restricted to indexes, the fund will not be allowed to hold more than 30 percent of the voting shares of any firm, and investment decisions will be made by a board charged with a fiduciary responsibility to manage the fund in the best interests of the contributors and beneficiaries.

Critics of individual accounts raise a number of concerns beyond the ones I have already mentioned. Some opponents of these accounts worry about how to maintain Social Security as a progressive program that is fair to all Americans. For example, proposals to contribute a flat percentage of the payroll tax to individual accounts benefit high income workers the most. In contrast, proposals to use budget surpluses to make equal dollar contributions to individual accounts could be highly progressive.

Some opponents of individual accounts believe that the administrative costs of these accounts would be excessively high. The administrative cost of the current Social Security system is extremely low, representing less than one cent of every dollar of contributions. Investing part of the Trust Fund in equities would raise that cost only slightly, with the additional expenses probably amounting to less than a few basis points of each dollar invested. But the cost of directing the appropriate contributions to millions of individual accounts and managing the assets in those accounts could be much higher. In Chile and the UK, for example, the administrative costs of individual accounts may reduce retirement income by 20 percent or more. And in the United States, even passively managed index funds incur expenses that average around 60 basis points per year, according to a recent Department of Labor study. Moreover, analysts note that many proposals for individual accounts involve accounts that would be quite small, especially when they were first created, so that any fixed cost per account could absorb a significant share of the annual investment return for many people. The Federal Thrift Savings Plan incurs costs of about 10 basis points per year, but it allows for only a small range of investment choices, and all of its participants work for the same employer. Restricting investment options or services in individual accounts would reduce costs, but might disappoint people accustomed to better service for their private portfolios.

If individual accounts are introduced as part of the solution to Social Security's actuarial imbalance, the question will arise whether to require people to convert their account balances to annuities when they retire. One advantage of requiring annuitization is ensuring that individuals do not outlive their assets. Such a step may be especially important if withdrawals from individual accounts substitute for some part of traditional Social Security benefits, which automatically take the form of annuities. Requiring annuitization also minimizes the problem of adverse selection, which raises the price of private annuities today and reduces their use. But people may want to bequeathe some of their accumulated wealth, and requiring annuitization would restrict their ability to do so. Balancing these various objectives is another difficult problem.

In addition to proposals concerning individual accounts, uses of the budget surplus, and the investment policies of the Trust Fund, negotiations on Social Security reform may entail consideration of options regarding changes in the retirement age. As I mentioned earlier, and as you know, at the same time that people are living longer, they are retiring earlier. The increasing share of life spent in retirement--which is evident in other industrialized countries as well--is in part a natural reaction to higher income. But it may also be partly a reaction to public policies that unduly encourage retirement at specific ages. Social Security reform plans have been proposed that would phase in more rapidly the currently scheduled increase in the normal retirement age to 67, raise the retirement age beyond 67, or index the retirement age to life expectancy. Examining these proposals should be part of the public debate. But in the interest of fairness, we must look closely at the likely impact of any reform in this area on those Americans in physically demanding jobs or with disabilities.

I do not intend this discussion of difficult choices to imply that no solution can be found to the challenges posed by an aging society. Indeed, I am confident that a bipartisan effort to reform Social Security can succeed next year. But to achieve this goal, and to prepare the nation for the retirement of the baby boomers, we must continue to ask hard questions about alternative reform proposals. There is no magic bullet for Social Security reform, but careful analysis and thought can help guide us to the best decisions.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Alan S. Polasky (CN=Alan S. Polasky/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME: 8-JAN-1999 18:05:55.00

SUBJECT: erp - climate change section

TO: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

CC: Quindi C. Franco (CN=Quindi C. Franco/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

CC: Joseph E. Aldy (CN=Joseph E. Aldy/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Janet and Jeff: Attached is a version of the climate change section of chapter 5 that incorporates the breakdown of the EEI. The changes between this version and the existing version occur in a couple paragraphs both before and after the box on energy efficiency since the '70s. I'll await your opinion on which version we should use. Steve
=================== ATTACHMENT 1 ===================
ATT CREATION TIME/DATE: 0 00:00:00.00

TEXT:
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The following is a HEX DUMP:

Innovation and Diffusion: An Application to Climate Change Policy

Policies to address the threat of climate change, due to the long-run nature of this environmental problem, will require the abatement of greenhouse gas emissions over decades and even centuries. Under these circumstances, the impact of environmental regulation to address the problem on the incentives to innovate cannot be ignored. The ultimate cost of global efforts to address this environmental challenge will depend importantly on the pace at which such innovation takes place. The Administration's efforts to address climate change therefore incorporate many of the principles discussed above to create appropriate incentives to promote innovation and speed diffusion of new technology. These efforts are reflected both in achievements in international negotiations and in domestic actions.

BOX: Burning down the house

Emissions of greenhouse gases, primarily from the burning of fossil fuels and deforestation, have led to a 30 percent increase in the atmospheric concentration of these gases above levels prevailing prior to the industrial revolution. If emissions continue along their projected "business as usual" path, a doubling of greenhouse gas concentrations from pre-industrial revolution levels is likely midway through the next century. According to climate models, this could lead to global warming of between 1.8 and 6.3 degrees Fahrenheit by 2100. Potential impacts include a rise in sea level, greater frequency of severe weather events, shifts in agricultural growing conditions due to changing weather patterns, changes in the availability of freshwater supplies, threats to human health from increased range and incidence of disease, and damage to ecosystems and biodiversity.

To address the risks of climate change, United Nations member countries have participated in a series of international negotiations including conferences in Rio de Janeiro in 1992, Kyoto in 1997, and most recently Buenos Aires in 1998. Building on the 1992 United Nations Framework Convention on Climate Change, the Kyoto Agreement places binding limits on emissions of greenhouse gases over the 2008 to 2012 period in industrial countries. The Agreement contains several features that may promote cost-effective reductions of these gases, including the flexibility to trade emissions reductions across gases, provisions allowing for international trading of emissions allowances among countries assuming binding emissions limits, and opportunities to invest through the "Clean Development Mechanism" in clean-energy projects in developing countries that generate emissions credits for use in industrialized countries.

The Kyoto Agreement embodies the Administration's preference for incentive-based environmental regulation through its emphasis on international emissions trading. As noted, an incentive-based approach should provide firms with strong incentives to find low-cost methods of reducing or sequestering greenhouse gas emissions. By "getting prices right" this approach also stimulates the diffusion of existing technologies as well as providing private sector incentives for R&D for the next generation of technologies. In addition, announcing emissions targets well in advance may produce payoffs akin to those of a technology-forcing standard. This approach provides incentives for firms to innovate while allowing them time to adjust by replacing depreciating plants with equipment incorporating new technology, thereby further lowering the cost of emissions reduction.

In conjunction with the international trading system proposed under the Kyoto Agreement, the Administration supports developing a domestic greenhouse emissions trading program for the 2008 to 2012 commitment period. A domestic trading program, in conjunction with international emissions trading, would allow U.S. firms to participate in international trading of greenhouse gas emissions, resulting in an efficient, low cost national abatement strategy.

Because 85 percent of domestic greenhouse gas emissions come from the burning of fossil-fuels, achieving climate change policy goals will require improving the energy efficiency of the economy. The rate of energy efficiency improvement (EEI) across the economy can be thought of as the sum of three factors: market-induced energy efficiency improvement, policy-induced energy efficiency improvement, and autonomous energy efficiency improvement. Market-induced improvement reflects the effect of changes in energy prices on consumption decisions. Policy-induced improvement reflects the effects of policies on energy consumption. The autonomous component of energy efficiency improvement is that part that would take place even in the absence of policy and market price changes. The gradual structural shift in the United States economy away from basic manufacturing (and agriculture) toward services, which are less energy-intensive, appears to dominate this component.

Box: Energy Efficiency since the 1970's

Energy efficiency in the United States is now much greater than it was at the time of the first oil shock 25 years ago. Nevertheless, the United States consumes more energy than it did in 1973. The ratio of energy use to GDP (BTU/$), which is a measure of the energy intensity of output, fell rapidly in the 1970s and early 1980s, but stopped declining in the late 1980s. More recently the ratio has again begun to decline (see chart 5-2). Despite these efficiency gains, total energy use rose by 27 percent between 1973 and 1997 (see chart 5-3), stimulated by population growth and rising per capita GDP. Virtually the entire increase came after 1986, a period of relatively low energy prices. Before 1986, relatively high energy prices had kept energy use flat.

One of the most dramatic increases in energy use has been in the motor vehicle transportation sector, where annual vehicle fuel consumption rose 55 percent between 1970 and 1996. The average fuel-efficiency of new passenger cars more than doubled between 1973 and 1996, from 14.2 to 28.7 miles per gallon. Despite this impressive gain in fuel-efficiency for passenger cars, overall fleet fuel-efficiency has not increased as much because of the shift toward light-duty trucks and sport-utility vehicles. In addition, efficiency gains were partially offset by an increase in miles traveled per vehicle and a large increase in the total number of vehicles. The net effect of all of these changes has been a small decline in fuel use per vehicle but a large increase in energy consumption due to the increase in the number of vehicles (see chart 5-4).

In the residential sector, by contrast, energy use has declined as efficiency gains have more than outpaced increases in the number of households, in average house size, and in the average number of appliances per household. For example, the efficiency of the average new refrigerator improved 192 percent from 1972 to 1996. Per household energy use declined rapidly in the late 1970s and early 1980s but has been stable since.

Policies can provide incentives to invest in energy efficient technologies and increase the rate of energy efficiency improvement through price changes. For example, the Administration's economic analysis on climate change found that a tradable permit program that results in permit prices of $23 per ton of carbon would increase the annual rate of energy efficiency improvement approximately 25 percent above the level projected for the next two decades without such policy.

In addition to policies affecting energy prices directly, the Administration believes that a strong argument can be made for policies to stimulate innovation and diffusion through R&D and appropriate fiscal incentives. The President's Fiscal Year 2000 budget includes continued funding for the Climate Change Technology Initiative (CCTI), a program designed to spur the development and adoption of new energy-saving and carbon-saving technologies through tax incentives and R&D investments. Many of the components of the CCTI reflect recommendations made in a 1997 report by the President's Committee of Advisors on Science and Technology. The Committee found that "the inadequacy of current energy R&D is especially acute in relation to the challenge of responding prudently and cost-effectively to the risk of global climatic change from society's greenhouse gas emissions." By providing public support for energy R&D through the CCTI, the level of innovation will likely increase, offsetting in part the appropriability problems associated with this type of R&D.

The proposed FY2000 CCTI package contains $X billion over the 1999-2003 period in tax credits for energy-efficient purchases and renewable energy, including tax credits of $3,000 to $4,000 for consumers who purchase highly fuel efficient vehicles, a 15 percent credit (up to $2,000) for purchases of rooftop solar equipment, a 20 percent credit (subject to a cap) for purchasing energy-efficient building equipment, a credit up to $2,000 for purchasing energy-efficient new homes, an extension of the wind and biomass tax credit, and a 10 percent investment credit for the purchase of combined heat and power systems. The package also contains $X billion over this five-year period in additional research and development investments -- covering the four major carbon-emitting sectors of the economy (buildings, industry, transportation, and electricity), and carbon removal and sequestration. The FY2000 proposal builds on the FY1999 budget, which included more than $1 billion in CCTI R&D funding. The FY1999 budget represents a 25% increase over the FY1998 climate change R&D appropriations.

(CONFIRM TAX INCENTIVE PROPOSAL FOR FY2000)

Complementing these fiscal measures, the federal government can undertake other actions to promote the diffusion of climate-friendly technology. In October 1997, the President called for a series of steps to reduce energy use in Federal buildings, transportation fleets, and other equipment purchases, and to promote the use of renewable energy sources. As the nation's largest single energy user, the federal government spends nearly $8 billion each year for power to operate facilities, vehicles and industrial equipment, and more than 90% of this energy derives from fossil fuels. The federal government plans to expand its procurement of renewable and less carbon-intensive fuels. These efforts will accelerate the diffusion of new energy efficient and carbon-lean technologies. Further, the federal government's experience with these technologies should facilitate diffusion by demonstrating their applicability and feasibility for other users.

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==================== ATTACHMENT 1 ====================
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[Note to Mike Treadway, editor: Sentences in square brackets may be dropped in the final revision to shorten the chapter]

Chapter 7: The Evolution and Reform of the International Financial System

INTRODUCTION

The financial problems that began in Asia in the second half of 1997 have exposed weaknesses in emerging market countries and in the international financial system. In response to the widespread financial turmoil, the United States has taken steps, jointly with the international community, not just to contain the financial crisis, but also to foster reforms of the international financial system to make it less-crisis prone in the future.

This turmoil followed a robust period of increasing integration of world product and financial markets. The trend toward increasing integration is perhaps best epitomized by the long-anticipated realization of European Monetary Union in January 1999. Even as this historic monetary union takes place, repeated episodes of financial turmoil in the 1990s have generated concern about the possible adverse consequences of financial and monetary integration.

The recurrence of currency and financial crises in the world economy poses major challenges to policy makers. Is the process of financial integration and globalization partly to blame for the observed instability? What are the causes of these recurrent crises, instability, and financial market volatility? Does integration into modern global financial markets require an increasing loss of macroeconomic policy autonomy? Should free capital mobility be restricted with capital controls? What regime of exchange rates in small countries is best-suited for the new world of global capital mobility? Can the Bretton Woods institutions (the IMF and the World Bank), which were designed for a world of fixed exchange rates and limited capital mobility, still ensure the stability of the international financial system in a radically different environment? What institutional framework provides stability for the international financial system? Developing answers to these questions will be critical to our efforts to strengthen the stability of the international financial system and ensure that the process of global financial integration will continue to sustain prosperity and growth in the world economy.

The chapter starts with the main elements of the proposed reform of the international financial architecture. It then provides an analysis of the next steps to be considered in the redesign of the international financial system. Finally, it considers European Monetary Union, the prospects for the euro as an international currency, and possible implications for the U.S. dollar.

1. REFORM OF THE INTERNATIONAL FINANCIAL ARCHITECTURE

As explained in Chapter 1, the international community, under U.S. leadership, responded to the prolongation of the crisis in 1998 with a series of initiatives in the Fall. Those reforms to the international system designed to reduce the incidence of future crises go under the name of the "new international financial architecture." The aim is to create an international financial system for the 21st century that captures the full benefits of global markets and capital flows, minimizes the risk of disruption, and better protects the most vulnerable. At the same time the system must promote international financial stability. The work done in 1998 was only the latest stage in an evolutionary process that had been underway for some years.

FROM HALIFAX TO THE G22 REPORTS

A broad debate on the steps needed to strengthen the international financial system was already underway when the Mexican peso devalued suddenly in December 1994. The ensuing peso crisis gave the debate considerable impetus and pertinence. The annual Summit of G7 leaders in 1995 held in Halifax, Nova Scotia, initiated work in a number of areas. One such area was the need for additional means to achieve an orderly resolution of future financial crises. The Finance Ministers and Central Bank Governors of the G10 countries were asked to review ideas. The G10 established a working party that submitted a report – informally known as the Rey Report, after its chairman – to the ministers and governors in May 1996.

The report noted recent changes in financial markets that, in some cases, have altered the characteristics of currency and financial crises in emerging markets. It indicated that neither debtor countries nor their creditors should expect to be insulated from adverse financial consequences in the event of a crisis. It also stressed the need for better market-based procedures for the workout of debts when countries and firms are under financial distress. Specific reforms of bond contracts were proposed to encourage the cooperation and coordination of bondholders when the financial distress of a country or corporation requires the restructuring of the terms of a bond contract. It also suggested a review of IMF rules on "lending into arrears" in order to extend the scope of this IMF policy to include new forms of debt. Such rules on "lending into arrears" would allow the IMF to continue lending, in certain unusual and extreme circumstances, to countries that had temporarily suspended debt-serviced payments but continued to maintain a cooperative approach towards their private creditors and to comply with IMF adjustment policies.

A number of important additional innovations came out of the Halifax process: the development of international standards for making economic data publicly available (under the IMF's Special Data Dissemination Standard); international standards for banking supervision (the so-called Basle core principles for banking supervision); an emergency financing mechanism in the IMF, the Supplemental Reserve Facility, to help members cope with sudden and disruptive loss of market confidence; and the decision to expand the IMF's backup source of financing under the New Arrangements to Borrow (25 potential participants to the NAB agreed to make loans to the IMF when supplementary resources are needed to forestall or cope with an impairment of the international monetary system, or to deal with an exceptional situation that poses a threat to the stability of the system).

Despite some progress in strengthening the system, the eruption of the Asian crisis in 1997 demonstrated the need to consider important further questions pertaining to the operation of the international system. In November 1997, on the occasion of the APEC (Asian

Pacific Economic Cooperation) Leaders Summit in Vancouver, a number of Asian leaders proposed a meeting of finance ministers and central bank governors to discuss the crisis and broader issues. They suggested that the meeting be global, that is, that it should include emerging-market countries, and not just the usual small number of major industrialized countries. President Clinton responded by calling on Secretary Rubin and Chairman Greenspan to convene such a meeting. Finance ministers and central bank governors from twenty-two countries (the G22) thus gathered in Washington on April 16 to explore ways to reform the international financial system that could help reduce the frequency and severity of crises. Ministers and governors created three working groups to examine the following three general sets of issues: greater transparency and openness; stronger financial systems; and appropriate burden sharing between the official and private sector in times of crisis. The three working groups of the G22 presented their reports in October 1998 on the occasion of the annual meetings of the IMF and World Bank.

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Box 7.__: Membership in some steering groups of the international financial system

The G-7 (including annual summits of national leaders): United States, Japan, United Kingdom, Germany, France, Italy, and Canada

The G-10 (which has 11 members): Same as the G-7, plus the Netherlands, Belgium, Sweden, and Switzerland

The G-22: Ad hoc group with membership same as the G-10, plus...

The G- (an expanded version that met __, 1998): Same as the G-22, plus...

[Omit: IMF Interim Committee, BIS, OECD...?]

GREATER TRANSPARENCY AND OPENNESS

There is a broad consensus on the need for greater transparency by the private sector, national authorities and international financial institutions. The Asian crisis made clear anew that it is important for countries to provide sufficient information about macroeconomic and financial conditions. This includes data on the size, maturity and currency composition of external liabilities, as well as accurate and comprehensive measures of the level of foreign exchange reserves. The crisis also underscored the need for countries' private sectors to provide accurate information about the financial accounts of banks and corporate enterprises. Without such information outsiders are unable to assess adequately the true conditions of governments and private sector firms. The crisis also made clear the importance of transparency on the part of international institutions themselves, and led to calls for the IMF and other international financial institutions to be more open and transparent about their activities, economic analysis, policy advice and recommendations.

The report of the G22 working group on transparency and accountability recommended that national authorities publish timely, accurate and comprehensive information on the external liabilities of private financial and corporate sectors as well as their own foreign exchange positions. The latter information would include both foreign exchange reserves and implicit liabilities deriving from their intervention in forward exchange rate markets. It recommended adherence to existing international standards for transparency. It agreed that standards in additional areas, including monetary policy and accounting and disclosure by private financial institutions, need to be developed. The report called for better monitoring of countries' compliance with such standards, including through IMF reporting on countries' adherence to internationally recognized standards. It also recommended that a working party be established to examine the potential for greater transparency of the positions of investment banks, hedge funds and institutional investors.

Finally, the IMF and other international financial institutions (IFIs) were called upon to be more open and transparent. Accountability is always important, and unnecessary secrecy would be particularly inappropriate in institutions that are telling others to be more transparent. For example, the report recommended that IFIs adopt a presumption in favor of the release of information, except where release might compromise confidentiality. It also called for publication of program documents, background papers to reports following the regular yearly visit by the IMF to a member state, Public Information Notices (PINS) following the IMF Executive Board discussion of reports on member countries economic conditions, retrospective program reviews, and other policy papers.

Increased transparency can help prevent the build-up of countries' financial and macroeconomic imbalances. For example, more information on the external debt of firms and banks could have limited investors' willingness to lend to such institutions in the first place. Transparency can also induce prompter policy adjustment by governments and help limit contagion by helping investors distinguish countries with sounder policies from those with weaker ones. Nonetheless, transparency alone will not be enough to prevent another major crisis from occurring. In Asia, greater transparency of information about net reserves and offshore liabilities of the financial and corporate systems might well have helped attenuate the crisis. But it is also true that many warning signals, found in data that were widely available, were missed. More is needed than just information.

REFORMING AND STRENGTHENING DOMESTIC FINANCIAL INSTITUTIONS

As discussed in Chapter 6, financial sector weaknesses in borrowing countries now appear to have been a central cause of the Asian crisis, as well as some previous financial crises. [Commercial banks and other financial institutions borrowed excessively from abroad and lent excessively at home, channeling funds toward projects that were not always profitable. Insufficient expertise in the regulatory institutions led to weak regulation of the financial system, and particularly to lax supervision of banks. Insurance of residents' bank deposits was poorly designed or only implicit. What is termed "connected lending" was widespread: banks and other financial firms in a business group would make loans to other firms in the same group without objectively evaluating or monitoring their soundness. The result was often distorted incentives for project selection and monitoring. All these factors contributed to the build-up of severe structural weaknesses in the financial system. The most visible manifestation was a growing share of non-performing loans. The problem was exacerbated by the increased supply of funds from abroad, the latter in part facilitated by the process of capital account liberalization and financial market deregulation in the region during the 1990s.]

The recurrent link between currency, debt and banking crises is now clear. Strengthening domestic financial systems will thus be a central element of ongoing systemic reform. The list of specific measures required is long, and will take years to complete. A partial list of the reforms recommended by the G22 includes:

- strong prudential regulation and supervision of banks and other financial institutions;
- design of explicit and effective deposit insurance schemes to protect bank depositors;
- design and implementation of bankruptcy and foreclosure laws for insolvent firms;
- development of liquid and deep financial markets, especially markets in securities (bonds and equities);
- national implementation of the Basle core principles of banking supervision and of the objectives and principles of securities regulation set by IOSCO (the International Organization of Securities Commissions);

- coordination and cooperation among international organizations and international supervisory entities in strengthening financial systems;
- technical assistance for and training of government officials and regulators;
- improvement of corporate governance in both the financial and non-financial sectors, so that investment decisions respond to market signals rather than to personal relationships;
- implementation of efficient insolvency and debtor-creditor regimes that would facilitate workouts for corporations in financial distress. These may include procedures for systemic bank and corporate restructuring and debt workouts.

BETTER CRISIS RESOLUTION, INCLUDING APPROPRIATE ROLES FOR THE OFFICIAL COMMUNITY AND THE PRIVATE SECTOR

While strengthening financial systems may prevent some crises from occurring or make those that do occur less virulent, it cannot be expected to eliminate them altogether. As a result, it is essential to establish means of resolving crises at minimum cost to economic growth without undermining appropriate incentives for prudent private and public behavior. This very important task constitutes the third and final pillar of the set of international financial reforms proposed in October by the G22 working groups.

The G22 report identified policies that could help facilitate the orderly resolution of future crises, including policies and procedures that could facilitate appropriate private sector involvement in crisis resolution. Private sector burden-sharing, i.e. private sector assistance in crisis resolution, is critical. In many crisis circumstances, official money will not be available in large enough quantities. Moreover, the perception that sufficient official assistance will be made available to allow a country to meet all contractual obligations without commensurate commitments from the private sector could distort the incentives of both creditors and debtors. Therefore, appropriate private sector involvement helps to induce market discipline and reduce potential moral hazard problems that might otherwise be associated with official assistance. [While the international community will continue to provide assistance -- conditioned on economic reform -- to deal with the problems that gave rise to economic crises, it is important to develop mechanisms to allow the private sector to participate constructively to the containment of crises and their resolution over time.] We need to find constructive ways to "bail in" private investors, not bail them out.

New procedures suitable to modern markets need to be developed for effective management of financial difficulties of firms and countries. When banks accounted for the majority of international capital flows, troubled debtors could more easily negotiate with a small number of banks and resolve crises, jointly with the official support of international financial institutions. This orderly resolution of debt problems often entailed agreements to pospone debt repayments (debt restructuring) and/or to reduce the overall value of the obbligation (debt writedown). As discussed in Chapter 6, the proliferation of creditor institutions and instruments and the growth of international bond markets makes it more difficult to coordinate the actions of creditors during a crisis. As a results, troubled debtors may be more likely to take unilateral actions such as mandatory debt restructurings and moratoria on repayment of debt that can be highly disruptive. Unfortunately, such unilateral actions can themselves lead to contagion, if they increase investors' concern that other countries may follow similar policies. For example, this might account for why Russia's unilateral debt restructuring in August 1998 led to financial market disruption as far away as Latin America.

Pursuant to the goals of encouraging effective crisis containment and resolution, the G22 report made a number of recommendations.

- **A range of policies to help prevent crises and limit the scope of those crises that do occur.** Recommendations included the maintenance of appropriate exchange rate regimes. Government were also encouraged to develop liquid domestic bond markets and urged to limit their guarantees of the liabilities of financial institutions. In addition, the report called for developing insurance schemes that protect borrowers against sudden reversals of capital flows. An example might be the contingent credit lines arranged by Argentina with a number of private financial institutions. Similarly, it endorsed debt contracts that explicitly provide for greater automatic risk-sharing between debtors and creditors, i.e. contracts where payments are reduced in the event of adverse circumstances. For example, debt contracts might specify payments that are contingent on prices of primary commodities exported by a country. Finally, it called for implementing effective insolvency and debtor-creditor regimes. This implies designing and implementing effective bankruptcy, restructuring and foreclosure laws and procedures.

- **Measures that could improve creditor coordination in the event of a crisis.**

  Following up on the recommendations of the 1996 Rey Report, the G22 proposed to include creditor coordination clauses in bond contracts among debtors and creditors. These clauses are designed to create an environment in which all parties – creditors, debtors and IFIs – can work together to reach the best resolution to a crisis.

  "Collective action clauses" in bond contracts are needed to overcome the problem inherent in having a large number of creditors. For example, a clause for the collective representation of creditors (such as the formation of a creditors' committee) can facilitate efficient coordination among a large group of creditors. Also, a "majority action clause" prevents a small minority of creditors from impeding a debt restructuring agreement, by allowing a qualified majority of creditors to alter the payment terms of the debt contract. Currently, most contracts require unanimity to restructure the terms of the contract. Similarly, "sharing clauses" mandate the equal treatment of creditors by imposing a fair division of payments among creditors. This discourages disruptive legal action and preferential settlements that benefit a few creditors at the expense of others.

- **New methods of crisis management in the extreme case of a temporary suspension of debt payments.** Recent experience (as in Russia in 1998) has underscored that unilateral mandatory suspensions of debt payments and restructuring actions can be highly disruptive, especially if they substitute for policy reform and adjustment. However, a temporary suspension of debt payments may occur nonetheless, particularly in the event of unanticipated adverse market developments. In these exceptional cases, the report emphasizes the need to have orderly and cooperative approaches for negotiating the restructuring of contractual obligations. The report emphasized that unilateral actions need to be avoided because of their significant economic and financial costs. The report argued that a temporary suspension of debt payments (the interest due on bonds and loans and/or repayment of the principal) should not, and normally would not, be undertaken by countries until all other reasonable alternatives have been exhausted. If a country suspends its debt payments, it is technically "in arrears" in its payments to private creditors. In those exceptional cases when a country experiences a severe crisis and a temporary suspension of debt payments cannot be avoided, the international community and private creditors still have an interest in providing countries with incentives for strong and sustained policy adjustments and structural reforms. The report suggested that the international community can signal its conditional willingness to provide financial support, when appropriate, even if the country has imposed a temporary payments suspension. An IMF policy of lending to a country that has suspended payments and has not yet cooperatively restructured its debt with private creditors is referred to as IMF "lending into arrears". Such policy should be provided only if a government's decision to suspend payments reflects the absence of reasonable alternatives, if the government is willing to undertake strong policy adjustment, and if the government is engaged in good faith efforts with creditors to find a cooperative solution to the country's payments difficulties. [Under these circumstances, to insist that a country clear up its arrears as a prerequisite for becoming eligible for IMF funding, might amount to an attempt to minimize the burden on creditors, at unreasonable cost to the debtor.]

- **Measures to help facilitate prompt and orderly workouts of external debt.** National insolvency regimes (such as bankruptcy and corporate restructuring laws) should, where adequate, provide the appropriate legal and institutional framework for the restructuring of corporate debt. Nonetheless, a crisis in the corporate sector is sometimes of sufficient magnitude to threaten the solvency of the entire financial system in the crisis country. Standard bankruptcy laws, for example, did not seem to operate successfully in some Asian countries in 1998. Several measures can be undertaken to facilitate the orderly workout of external debt. One such measure is available in domestic insolvency regimes --such as corporate restructuring under the U.S. Chapter 11 -- that allow firms under financial distress to obtain new, senior credits to assure their ongoing operations during the restructuring of their debt. (Seniority means that the new lenders will be first in line to get repaid. Without such assurance they are unlikely to come forward.) Analogously in the international context, the report suggested that means of encouraging the private sector to provide new credits, in the event of a debt crisis or suspension of debt payments, should be considered. Otherwise, loans for basic purposes such as working capital for production and exports can become unavailable. Moreover, the government may also need to develop a framework for encouraging out-of-court negotiations between private debtors and their creditors. [Such a framework might include: (i) the establishment of creditors' committees; (ii) the removal of country-specific legal and regulatory obstacles to debt restructuring; and (iii) in certain extreme cases, the establishment by the government of exchange rate insurance schemes to reduce the foreign exchange rate risk borne by firms. These schemes could also be designed to provide incentives for firms to restructure their outstanding foreign currency liabilities.] Moreover, international support can also be harnessed to support restructuring efforts. For example, one goal of the Asian Growth and Recovery Initiative recently launched by the U.S. and Japan is to support implementation of more comprehensive and accelerated restructuring of banks and corporations in the crisis-afflicted countries in Asia.

Implementation of the reforms of the international financial architecture suggested by the G22 reports will take time. But it also promises to reduce the likelihood of future crises and the severity of those that do occur. For its part, the G7 strongly signaled its commitment to begin implementing some reforms in its October 30 Declaration, a subject considered next.

[ADOPTION OF MEASURES TO REFORM THE INTERNATIONAL FINANCIAL ARCHITECTURE

Considering the work of the G22 reports and following detailed discussions, including with officials from other industrial and emerging market economies, the Finance Ministers and Central Bank Governors of the G7 countries agreed, in their October 30 Declaration, on specific reforms to strengthen the international financial system. In the words of their communique, they

> *agreed to carry these forward through our own actions and in the appropriate international financial institutions and forums. These reforms are designed to: increase the transparency and openness of the international financial system; identify and disseminate international principles, standards and codes of best practice; strengthen incentives for countries and economic agents to meet these international standards; and strengthen official assistance to help developing countries reinforce their economic and financial infrastructures. They also include policies and processes to ensure the stability and improve the surveillance of the international financial system. Finally, they aim at reforming the International Financial Institutions, such as the IMF, while deepening cooperation among industrialized and developing countries.*]

2. FURTHER STEPS TO STRENGTHEN THE INTERNATIONAL FINANCIAL ARCHITECTURE

In its October 30 Statement and Declaration, the G7 committed to a number of reforms consistent with the recommendations of the G22 working groups as well as a great deal of additional analysis and research. The G7 also stressed the need for the international community to widen its efforts to strengthen the international financial system. The G7 thus committed to initiate further work on a number of other important areas to identify additional concrete steps to strengthen the international financial architecture. These include:

- examining the additional scope for strengthened prudential regulation in industrial countries.
- further strengthening prudential regulation and financial systems in emerging markets.
- developing new ways to respond to crises, including new structures for official finance and new procedures for greater private sector involvement in crisis resolution.
- assessing proposals for further strengthening of the IMF.
- seeking to minimize the human cost of financial crises and encouraging the adoption of policies that better protect the most vulnerable in society.
- consideration of the elements necessary for the maintenance of sustainable exchange rate regimes in emerging markets.

Each of these steps poses a number of issues and challenges. Many of these are inter-related and are addressed in the sections below.

STRENGTHENED PRUDENTIAL REGULATION AND SUPERVISION IN INDUSTRIAL COUNTRIES

The crises of the past year have revealed some gaps in the international regulatory infrastructure promoting financial stability and overseeing national financial systems. Global financial integration has led to a proliferation of financial institutions making cross-border financial transactions, the emergence of off-shore financial centers and hedge funds, and the development of a wide range of derivative instruments. In this new environment, investors may underestimate risks during periods of market euphoria, and thus contribute to an excessive build-up of exposures during the upswing.

Such developments pose significant challenges to financial regulators and supervisors. Creditors and investors in industrial countries need incentives to act with greater discipline, i.e., to analyze and weigh risks and rewards appropriately in their lending and investment decisions. Thus, there is a more urgent need to examine the scope for strengthened prudential regulation and supervision in industrial countries. Three aspects of these regulatory challenges are explored below.

Enhanced international financial supervision and surveillance

While, traditionally, supervision and regulation of financial systems have been *domestically*-based, the increased global financial integration and the proliferation of institutions doing cross-border transactions suggest the need for enhanced *international* financial supervision and surveillance. Accordingly, appropriate supervisory regimes of the international financial system need to be devised. Better national and international procedures are needed to monitor and promote stability in the global financial system.

The International Financial Institutions, working closely with international supervisory and regulatory bodies, need to conduct surveillance of national financial sectors and their regulatory and supervisory regimes with all relevant information accessible to them. Processes of peer review could be utilized in conjunction with the IMF's regular surveillance of its member countries.

Although good financial supervision must start at the domestic level, international institutions and national authorities involved in financial sector stability will need to work jointly to foster financial stability and reduce systemic risk. They will need also to exchange information more systematically on the risks that exist in the international financial system. In this regard, the design of a policy-oriented forum including finance ministries, central banks and securities regulators from the major G7 countries, key emerging markets, relevant international organizations and international financial institutions would be useful.

Strengthened bank capital regulation

At the heart of the issue of bank regulation are banks' capital adequacy standards. As discussed in chapter 6 (see Box 6-5), banks may have an incentive to make excessively risky investments, since much of the cost of failure may be borne by either depositors or the government. To mitigate this tendency, banks are required to hold a certain amount of their own capital in reserve against the loans they make.

That many banks are currently active on a global scale leads to good reasons for international bank capital standards. First, globally active banks headquartered in countries with low requirements would otherwise be at an advantage with respect to those headquartered elsewhere. In addition, by virtue of their global scale, the impact of global bank failures would likely extend well beyond national borders.

The 1988 Basle Capital Accord (named after Basle, Switzerland where representatives of industrialized-country central banks meet regularly) established an international standard by recommending that global active banks maintain capital equal to at least 8 percent of their assets. In addition, the Accord sought to distinguish between more and less risky assets, and required that more capital be held against investments with greater risk. As a result, the Accord called for banks to maintain capital equal -- not to 8 percent of their *total* assets -- but to 8 percent of their *risk-weighted* assets. Safe government bonds or cash, for example, have a zero weight in calculating aggregate risk exposure, while long-term lending to emerging markets banks has a 100% weight. Such minimum capital standards were meant to work in conjunction with direct supervision of banks and basic market discipline to restrain excessive risk-taking by banks with access to the safety net.

Even at the time of their adoption, it was recognized that the standards called for in the

Accord might need to be reviewed and strengthened in the face of developments in the international financial environment. Effective capital regulation is an evolutionary process and the standards have already been improved in a number of ways in the decade since their first adoption. However, some shortcomings of the system have become more apparent as a result of recent developments. First, a number of financial innovations make it easier for banks to assume greater risk without being subject to increased capital charges [, contrary to the intent of the Accord]. Second, traditional assessments of credit risk might fail to account for some extreme circumstances. Third, current standards may have encouraged banks in developed countries to make short-term rather than longer-term loans to banks in emerging markets, since risk weights on the former assets are lower than those on the latter. Recent experience, however, suggests that short-term cross-border interbank flows are in fact subject to greater volatility. A fourth shortcoming concerns the treatment of off-balance sheet items such as derivative positions, committed credit lines, and letters of credit. They create new types of risk that current standards inadequately address. These off-balance sheet items, like bets on football games, are not assets and are thus recorded "off balance sheet." Stock in a football team, on the other hand, is an asset and is recorded "on balance sheet." Nevertheless, both pose risks. Finally, different standards of regulation may be appropriate for sophisticated international banks than regional or community banks.

The task of improving further the Basle Capital Accord has just started. No consensus has yet emerged concerning reform of bank capital regulation. But it is likely that a strong and effective system of capital regulation will need to rely on several components: strengthened capital standards; improved internal risk-management controls in banks, including greater reliance on robust banks' own models of risk assessment; and increased reliance on market discipline. [For example, a useful approach may be value-at-risk models, already used internally by some banks. These are sophisticated models that consider the risk and correlation of returns on all the assets and liabilities of a bank to derive a measure of market risk in a bank's portfolio (i.e, how much a bank may lose because of a change in prices of assets and liabilities). However, such models can be improved by testing them for their robustness to a range of different kinds of stress in order to assess the many other risks faced by banks in addition to market risk. In fact, extreme market conditions and financial crises create additional risks (such as credit risk, counterparty risk and liquidity risk) that traditional models of the type and distribution of risks cannot assess well.]

It may also be beneficial to rely more on market discipline for bank capital regulation. For example, some have suggested a scheme whereby banks are required to issue subordinated debt equal to a specified proportion of their risk-weighted assets. Since this debt is subordinated, it is only paid after more senior claims are satisfied. As a result, financial institutions buying this debt will have a strong incentive to monitor the risk taking behavior of banks issuing it. In this sense, market discipline can be used to complement direct regulation. The price of this traded debt may also be a signal to regulators of the markets' perception of financial soundness.

A broad debate is certain to be waged on the issue of how to provide effective capital regulation of banks in the globalized environment in which they now operate. The Basle standards were designed for G10 banking institutions, but the proliferation of financial institutions in emerging markets poses the question of whether the same standards adequately address the risks faced by institutions operating in emerging markets. One proposal is to restrict access to major financial centers to banks that -- not only meet the usual specific regulatory requirements -- but also reside in countries with adequate bank supervision. The purpose would be to help limit the risks deriving from the activities of developing-country banks, as well as to encourage good supervision in their home countries. This proposal is controversial, however, as emerging economies may perceive it as limiting competition and stunting their ability to develop their own banks and other international financial institutions. To address these concerns, these new standards will have to be developed by an appropriately diverse group of national authorities.

The rapid development of derivative instruments and their widespread use in international financial markets poses another host of difficult regulatory issues. Derivatives are contracts that are written in terms of the price of an underlying asset, such as options or futures contracts written in terms of stock prices. Derivatives can be used to hedge risks and thus have been very useful in risk-management by banks, other financial institutions, and corporate firms. However, they can also be used for taking speculative positions (increasing risk rather than decreasing it). Moreover, that they appear off-balance sheet makes it more difficult for the market and regulators to assess their contribution to the risks taken by the institution using them. If the creditworthiness of the counter-party is uncertain, firms or banks who believe they are hedged (e.g. against currency risk) may effectively not be.

A difficult issue concerns the type of regulatory oversight that should be put in place for derivative instruments. For example, excessive regulation of derivatives could lead the derivative business to move to unregulated offshore markets. The Administration is currently undertaking a long-term study of over-the-counter derivative instruments, including their potential risks and effects. This study will review recent market development, existing regulation, and what changes, regulatory or legislative, may be appropriate. It will investigate possibilities for reducing systemic risk and eliminating legal uncertainty. It will also assess the potential use of derivatives for fraud or manipulation, and methods for curtailing regulatory arbitrage, i.e., the situation in which market participants seek to exploit differences that exist in regulation among different jurisdictions.

Issues posed by hedge funds and other highly-leveraged investment funds

Hedge funds represent a relatively recent innovation in the financial markets. The near-failure of a prominent hedge fund (LTCM -- Long Term Capital Management) in September 1998 focused renewed attention on the role and activities of hedge funds and other highly leveraged entities.

It is challenging enough simply to define "hedge fund" in a precise way. The label is usually applied to investment funds that are unregulated because they restrict participation to a small number of wealthy investors (see Chapter 2 for a broader discussion of their activities). [They generally use sophisticated techniques to make very targeted investments. In addition, some of them use significant "leverage" -- that is, they make investments not only with their own funds but with sizable amounts of borrowed funds as well.]

The impact of hedge funds and other highly leveraged entities on financial markets certainly needs to be understood better. Treasury Secretary Rubin has called the President's Working Group on Financial Markets to prepare a study of the potential implications of the operation of firms such as hedge funds and their relationships with their creditors. A primary concern for regulators is that lenders manage the risks associated with extending credit to hedge funds appropriately. Regulation of the hedge funds themselves may not be easy or even appropriate. Regulation might, for example, lead such funds to move to unregulated offshore markets, in the same way in which the Eurocurrency markets in the 1960s emerged to get around regulation of U.S. financial markets.

The Administration-commissioned hedge fund study is looking at a number of issues. This includes questions of disclosure of information by entities such as hedge funds and the potential risks associated with highly leveraged institutions. Along these lines, the study is asking whether the government needs to do more to discourage excessive leverage and, if so, what the appropriate steps might be. A number of the Working Group agencies are also participating in several studies on the international aspects of these questions.

[The hedge fund study is just one example of a concrete initiative consistent with the G7's commitment to further the work of the three Working Groups and strengthen prudential regulation and supervision in their own financial systems. In its October 30 Declaration, the G7 governments also committed themselves to make progress on additional fronts. In their own countries, they pledged to investigate both the adequacy of risk management systems in financial institutions and existing prudential standards, and the efficacy with which they are monitored and enforced. The G7 also agreed that appropriate means should be sought to encourage off-shore centers to comply with internationally agreed standards, and called upon other countries that participate in the global capital markets to take similar action. Finally, the G7 also called for the BIS (Bank for International Settlements), in conjunction with national authorities, emerging market countries, and other relevant private and public sector bodies, to examine the question of appropriate transparency and disclosure standards for private sector financial institutions involved in international capital flows, such as investment banks, hedge funds and other institutional investors.]

STRENGTHENING PRUDENTIAL REGULATION AND FINANCIAL SYSTEMS, ENSURING ORDERLY LIBERALIZATION OF CAPITAL FLOWS, AND IMPROVING ECONOMIC POLICIES IN EMERGING MARKETS

The recent Asia financial crisis has focused attention upon a wide variety of financial policies, both international and domestic in scope. Considering the central role played by financial sector weaknesses in the crisis (see Chapter 6), the case for re-examination is particularly strong in the case of emerging markets. Accordingly, the second area for further work called upon by the G7 is the identification of concrete steps to further strengthen prudential regulation and financial systems in emerging markets. Clearly, this is an ambitious undertaking, and will require a vast number of issues to be considered and challenges to be overcome. Some of the most significant are addressed in the sections below.

Some nations have apparently been tempted to turn inward as a result of the financial crisis. Instead of facing the challenges of strengthening their financial institutions, a few have in effect decided to eschew the benefits of international capital flows. The arguments for free capital mobility are numerous, however, especially when domestic financial systems are strong and properly supervised and regulated. First, with unrestricted capital mobility, the market is free to allocate saving to the best investment opportunities. Investors can earn a higher rate of return abroad than they could if limited to the domestic market. Second, firms and other borrowers in high-growth countries can obtain funds more cheaply abroad than if they had to finance their investments at home. Third, free capital mobility allows investors and households to diversify risks and to have access to a larger pool of assets; the benefits of portfolio diversification are enhanced by access to foreign investment opportunities. Fourth, the scrutiny of global investors can provide an important discipline on policy-makers. Well-functioning capital markets can discourage excessive monetary and fiscal expansion, since inflation, budget deficits and current account deficits quickly lead to reserve outflows and currency depreciation. Fifth, there should be a general presumption in favor of allowing free transactions among economic agents. Logically, a case for restricting capital mobility requires the identification of distortions in the market allocation of capital.

Increasing the Resilience of Financial Systems

Nonetheless, international capital flows can be suddenly reversed, and openness potentially makes emerging economies more vulnerable to these reversals. As a result, policies to increase the resilience of their financial systems need to be identified. These include effective prudential regulation and supervision of financial markets. The G7 has suggested investigating concrete means of encouraging emerging economies to adopt international standards and best practices. In principle, this could be brought about both through market forces and through legal and regulatory measures. Countries might also be able to reduce their financial system vulnerability by adopting the following measures: encouraging greater participation in their markets by foreign financial institutions; developing a better credit culture in the banking system; and relying more on equity and other financing that does not result in the build-up of excessive debt burdens. This includes efforts to develop local/regional capital markets.

Orderly liberalization of capital flows

Most emerging economies have historically had heavily restricted capital markets. One point that has gained prominence as a result of the recent crisis is that liberalization must be carried out in a careful and well-sequenced manner if countries are to benefit from closer integration into the global economy. As noted above, the benefits of free capital flows are numerous. The United States and most other leading industrial countries, for example, do well without capital controls. As discussed in Chapter 6, if domestic financial systems are weak, poorly regulated and subject to institutional distortions, however, rapid capital account liberalization can lead to excessive short-term borrowing and lending, and a mismatch of maturities and currency denominations of assets and liabilities of financial institutions and corporate firms. Such tendencies have proven to be destabilizing in the many episodes of financial and currency crises. Effective regulatory and supervisory regimes must be in place and the financial sector must be poised to deal adequately with these risks as the capital account is liberalized. International financial institutions should play a constructive role in facilitating this orderly opening of the capital account.

It may prove useful to develop principles to help guide countries that are liberalizing and opening their capital markets so as to help reduce the vulnerability of their financial systems to sudden shifts in capital flows. Possible measure could include, for example, an open policy to foreign direct investment and promotion of longer-term equity financing. Conversely, it might be beneficial to discourage cross-border short-term interbank flows, which are likely both to be volatile and vulnerable to distortions arising from financial safety nets. There is now some support for a prudent management of these flows, at least within the sphere of prudential banking regulation.

Prudential regulation of short-term interbank cross-border inflows

One approach to ensure the stability of short-term cross-border interbank flows is through enhanced prudential banking standards. On the borrower side, a range of possible measures could be considered to help discourage imprudent foreign currency borrowing, while relying on market mechanisms to the extent possible. Prudential bank standards, such as limits on a bank's open foreign currency positions, if enforced effectively, could reduce the riskier kinds of foreign borrowing by banks. Some countries have experimented with regulatory requirements that force their banking systems to maintain "liquidity buffers" to protect against the risk of sudden shifts in funds out of the banking system. Argentina, for example, has required banks to maintain large, liquid reserves against their short-term liabilities, including their short-term foreign liabilities.

One could also try to encourage more prudent short-term cross-border interbank flows on the lender side, i.e., via the banks in the industrial countries. As already noted, current Basle capital adequacy standards provide incentives to lending banks in developed countries to prefer short-term loans to banks in emerging markets over long-term loans, since risk weights on short-term loans are lower than those on supposedly "more risky" long-term bank loans. Some have suggested adjusting risk weights on this type of loans to encourage more careful bank lending to emerging market entities that operate in weak financial systems.

Broader controls on all short-term capital inflows?

More controversially, some have suggested wider use of market-based, Chilean-style restraints on all short-term capital inflows to deter short-term foreign borrowing, not just via banks but by other means as well. Corporate firms are reported to have undertaken large-scale risky cross-border borrowing directly, rather than via the banking system, leading up to the crisis in Southeast Asia, for example. It has been argued, e.g., in support of Chile's approach, that regulation on inflows to banks alone will lead to evasion through corporate borrowing. Controls on general inflows have also been said to help in the management of monetary policy when surges in inflows create difficult problems (how to "sterilize" their impact, avoiding an inflationary surge in the money supply).

The effectiveness of such controls has been questioned. Evasion and leakages tend to make capital controls less effective over time. Also, the apparent success of Chile may have been due more to the very effective prudential regulation and supervision of the financial system than to capital controls. Finally, such controls have favored large corporations (who are more capable of raising funds directly in international financial markets) at the expense of small and medium ones.

The available empirical evidence from countries that have imposed controls on a broad range of short-term capital inflows shows that they do appear to have affected the composition of inflows (away from short-term maturities and towards the longer-term, and towards foreign direct investment), even though they do not appear to have affected the overall volume of capital inflows. Some argue that, if the rationale for controls is to reduce particularly risky short-term borrowing, the evidence can be seen as supportive. Opponents of such controls point out that, during the recent financial turmoil, Chile, Colombia and Brazil have all reduced their controls in order to stimulate urgently needed capital inflows and reduce pressures against their currencies. Proponents of Chilean-style controls reply that that these moves do not undermine the rationale of slowing down short-term capital inflows temporarily during a cyclical phase where such inflows are feared to be excessive, in contrast to the crisis or outflow phase of the cycle where it is sensible to remove the controls.

Evidence is not only mixed, but preliminary and based on the experience of a limited set of countries. Given the numerous arguments against them, policies to restrict all short-term inflows remain quite controversial.

Controls on capital outflows

In the aftermath of the Asian crisis, some have suggested that countries should introduce controls on capital outflows as a way to prevent "destabilizing" capital flight. One argument presented in their favor, for example in East Asia currently, is that they could help to stimulate growth by allowing lower interest rates. When the degree of capital mobility is high, a reduction in interest rates leads to capital outflows, and in turn to currency devaluation. Like high interest rates, currency depreciation can be recessionary because of the high burden of foreign currency debt. Capital controls therefore have been advocated to break the link between interest rates and exchange rates, allowing lower interest rates *without* the costs of a currency devaluation.

However, many arguments against capital controls in a crisis have been advanced. First, controls on outflows are often in practice administered in institutional frameworks in which they are used to extract rents and delay necessary reforms. Elaborate foreign exchange controls lead to rent-seeking behavior and corruption, and distort international trade. Second, the correct policy response to the structural problems underlying the Asian crisis is a sound, well-regulated and effectively supervised financial system, thus avoiding the policy distortions that lead to excessive borrowing. Capital controls divert attention from that remedy. Third, approval of targeted controls might lead countries to use capital controls indiscriminately, thus insulating unsound macroeconomic policies from the discipline of the marketplace. Fourth, over time, investors tend to find ways to avoid controls. Fifth, capital controls and other restrictions of domestic capital markets are often a form of financial repression -- a distortionary form of taxation -- that reduces the incentive to save. Studies point out that capital controls in Latin America in the aftermath of the 1980s debt crisis led to negative real interest rates that eventually provoked more flight of capital out of the country rather than less. Sixth, controls on outflows may discourage capital *inflows*, since foreign investors fear they may not be able to repatriate the proceeds of their investments in the future. Finally, fears of controls on capital outflows can accelerate a crisis, rather than postponing it, and can lead to perverse international contagion. In this regard, it has been suggested that the news of capital controls in Russia and Malaysia in August 1998 was a factor in the spread of financial panic to Latin America and the other emerging markets.

Moreover, if the goal is to allow a reduction in interest rates in the context of Asia today, it must be pointed out that interest rates have already fallen substantially relative to the peaks of the crisis. (By the second half of 1998, they were back to pre-crisis levels in Korea.) In spite of this lowering of interest rates, there is still a severe credit crunch in a number of countries; many financial institutions are in severe financial distress and unwilling to lend to corporate firms suffering from severe debt overhang. If this analysis is correct, capital controls and lower interest rates would do little to ease the credit crunch.

Improving macroeconomic and other policies in emerging markets

In general, better policies in developing countries are needed to promote domestic stability and limit vulnerability to shifts in global capital. In addition to the policies needed to strengthen the financial systems, the following can enhance financial stability and foster long-term economic growth:

S*ound macroeconomic policies.* Countries need consistent monetary and exchange rate policies as well as fiscal policies that avoid excessive accumulation of government debt.

Prudent public debt management. Borrowing short-term, and in foreign currencies, can be very appealing to a government: it is cheaper and often easier in the short-run. But too much of this kind of borrowing makes countries vulnerable to sudden shifts in investor confidence. Sound debt management is important to insure against the risk of market disruptions.

S*tronger legal infrastructure*. The Asian crisis demonstrated that for private markets to work effectively, better financial regulation is not enough. There must also be clear and enforceable bankruptcy laws, for example, so that a crisis in a single bank or company can be dealt with before it spreads. There must also be sound corporate governance, so that investors' and shareholders' rights are clear, and strong judicial systems, so that laws in these areas can be clearly enforced.

NEW WAYS TO RESPOND TO CRISES, INCLUDING NEW STRUCTURES FOR OFFICIAL FINANCE AND NEW PROCEDURES FOR GREATER PRIVATE SECTOR INVOLVEMENT IN CRISIS PREVENTION AND RESOLUTION

The recent global financial turmoil has pointed to the need to develop new ways the international community to respond to crises. This entails exploring the possibilities of new structures for official finance that better reflect the evolution of modern markets. It includes examining new procedures for coordination of the relevant international bodies and national authorities, alongside greater participation by the private sector.

New structures for official finance

The G7 have called for an enhanced IMF facility to allow large-scale international assistance in the form of a precautionary line of credit, as opposed to a traditional package that is highly tranched (i.e., disbursed in successive rounds to keep borrowers on [a short leash of] strict policy conditionality). This proposed facility is intended to facilitate the rapid restoration of confidence in those cases where problems stem more from contagion in a world of large capital flows, than from poor policies.

A regime for crisis response should provide some combination of financial assistance and policy changes. The provision of large-scale official international finance raises difficult questions in itself: what criteria should be govern access to large scale assistance, and on what terms; how should it be linked to private sector involvement; and from where will the required resources come.

The logic of a precautionary facility

The rationale for a precautionary facility for countries subject to an attack in spite of their good economic policies is based on the possibility of "international bank runs" [, analogous to, but more complex than, domestic bank runs of the sort discussed in Box 6-5 in Chapter 6]. An international bank run can result if many bank depositors -- both foreign and domestic -- simultaneously seek to exercise their claims on financial institutions' foreign currency holdings. In such an event, a rapid loss of reserves and strain on the exchange rate is likely. In a domestic context, deposit insurance and the general "lender of last resort" role played by central banks are aimed at preventing self-fulfilling bank runs. However, such insurance creates moral hazard: if banks' deposits are insured and/or liquidity support is guaranteed in the case of a run, banks will have an incentive ex ante to make risky loans that they would not make in the absence of insurance. The solution to this problem is strong capital adequacy standards and prudential supervision and regulation of banks.

In the international context, the expected provision of official liquidity may also lead to distorted incentives: expectations of official emergency financing may lead international investors to lend carelessly and domestic governments to engage in risky policies. Moral hazard in the domestic context can be mitigated if insolvent banks can be distinguished from illiquid ones. Analogously in the international context, precautionary financial support should ideally be given to countries with good policies who are innocent bystanders in episodes of contagion and withheld from countries with weak policies. Drawing this distinction is even more difficult among countries than among banks. In practice there is a spectrum of crises, from those that stem primarily from poor policies to those that stem primarily from contagion. Most fall somewhere in the middle.

Just as there is a role, at times, for the government to intervene to prevent a domestic financial crisis from destabilizing the domestic financial system, so there is a role for the international community to intervene in an international financial crisis to help limit contagion and global instability, when appropriate. The current crisis has demonstrated that the official community needs, at times, to be able to provide large financing packages to quell potential contagion and instability. Congress' agreement in 1998 to support an increase in the IMF quota will -- highly leveraged by means of the waiting contributions of other countries -- provide the IMF with an important pool of new, uncommitted funds.

It may make sense in today's world of large and sudden liquidity needs for more official money to be available up-front in return for more up-front policy changes. In their October 30 Declaration, the G7 agreed that, in response to the current exceptional circumstances in the international capital markets, strengthened arrangements for dealing with contagion are needed. The central element would be the establishment of an enhanced IMF Facility that would provide a contingent short-term line of credit for countries pursuing strong IMF-approved policies, i.e., those cases where problems stem more from contagion than from poor policies. This facility could be drawn upon in times of need and would entail appropriate interest rates along with shorter maturities. The facility would be accompanied by appropriate private sector involvement.

Continued need for greater private sector participation

As described earlier in this chapter, The G22 Working Group report on international financial crises pointed to the need for future work to develop new procedures for orderly and cooperative crisis resolution. The G7 has called for similar work as part of the next steps identified in its October 30 Declaration. Old methods of crisis resolution were developed in a world dominated by banks. There is now a need to develop innovative ways for holders of new financial instruments to participate constructively in crisis containment and resolution. This is one of the key challenges going forward. Pre-negotiated contingent credit lines (such as those negotiated by Argentina with commercial banks) and financial provisions that provide greater explicit sharing of risk between creditors and debtors are two avenues worth exploration.

IMF REFORM

Proposals for strengthening the IMF, so as to improve its country programmes and procedures in crisis prevention and resolution, need to be assessed. This goes as well for proposals to strengthen the Interim Committee, which is a sort of IMF steering committee composed of representatives of member governments, and the Development Committee, which does the same for the World Bank.

MINIMIZING THE HUMAN COSTS OF FINANCIAL CRISES

The sharp recessions in East Asia have led to a steep increase in both the unemployment and poverty rates in that part of the world, inflicting severe social costs. Thus strengthening social safety nets in crisis countries is also an important goal of stabilization packages. Ways must be found to minimize the human cost of financial crises and encourage the adoption of policies that better protect the most vulnerable in society.

More attention must be given in times of crisis to the effect of economic adjustment on the most vulnerable groups in society. The World Bank should develop as a matter of urgency general principles of good practice in social policy, in consultation with other relevant institutions. These should be drawn upon in developing adjustment programmes in response to crises.

SUSTAINABLE EXCHANGE RATE REGIMES FOR EMERGING MARKETS

Exchange rate regimes vary in the degree of rigidity. There are more choices than simply "fixed" vs. "floating." They range from institutional arrangements like monetary unions, dollarized regimes, and currency boards, to conventional fixed exchange rates, to crawling pegs, basket pegs, managed floats, and free floats.

There is no single exchange rate regime that is best for all countries at all times: rather the choice must be based on a country's circumstances. Exchange rate regimes are institutional choices that signal policies, priorities, and commitments. Given that large fluctuations between the currencies of major countries economies are likely to continue, that many emerging markets have extensive trading ties to a number of major industrial economies, and that the credibility of the policy environment in many emerging markets will take time to establish, the choice of an appropriate exchange rate for emerging markets economy is particularly difficult. No matter what exchange rate a country chooses, it is critical that it be backed by strong financial regulation and appropriate monetary and fiscal policies. Macroeconomic stability is based on good policies, irrespective of the exchange rate regime. Policy mistakes that contribute to a currency crisis can occur in the context of any exchange rate regime.

The three goals of financial market openness, monetary policy independence, and exchange rate stability are not conceptually consistent -- a general principal known as the "impossible trinity". In other words, a country can have any two out of the three, but not all three; it must give up at least one. As we have seen, most countries have moved in the direction of increasingly open capital markets. This sharpens the choice between the other two goals. Under perfect capital mobility, a country choosing a fixed exchange rate loses its ability to pursue an independent monetary policy; conversely, autonomous monetary policy can be pursued only at the cost of being unable to peg the exchange rate. Therefore, a choice must be made between exchange rate fixity and monetary policy autonomy if free capital mobility is to be maintained.

Benefits of fixed exchange rate regimes

Why would a country choose to fix its exchange rate, if it must give up its monetary independence to do so? There are a variety of reasons.

By eliminating exchange rate risk, a fixed exchange rate regime may encourage international trade and finance. However, the evidence on the effects of exchange rate stability on trade volumes is mixed. The effects on trade and finance may be greater if a country goes beyond fixing its exchange rate and literally adopts the currency of a neighbor (monetary union or dollarization). The advantage of eliminating exchange rate volatility may look especially attractive to the extent that large market movements appear on occasion not to be founded on economic fundamentals.

Another potential benefit of fixed rate regimes is that they can provide monetary discipline. The loss of monetary autonomy under fixed exchange rates limits the ability of monetary authorities to pursue excessively expansionary and inflationary monetary policies. Relatively rigid fixed exchange rates can be an important signal of policy commitment to achieving and maintaining low inflation, especially when countries are seeking rapid disinflation from conditions of high inflation or hyperinflation, as part of a consistent plan for macroeconomic stability.

In some cases, fixed rates may contribute to greater fiscal discipline: reducing the ability of monetary authorities to monetize fiscal deficits may restrain tendencies to have loose fiscal policies. Adopting a fixed exchange rate does not, however, automatically provide policy discipline. Instead, adopting a fixed exchange rate and/or a currency board requires fiscal discipline and a strong financial system to be credible.

Currency boards, an extreme form of fixed exchange rates, may help to prevent currency crises, under certain conditions. (See Box 7-1 for a definition and discussion of currency boards.) But they limit the ability of the monetary authority to perform its function of lender of last resort if bank runs occur, an issue that is exacerbated when a fraction of the liabilities of the banking system is denominated in foreign currency. Strong financial systems with well-supervised banks (such as those in Hong Kong and Argentina) are thus important conditions for a successful currency board.

Benefits of exchange rate flexibility

Exchange rate flexibility has several benefits. Most succinctly, as already noted, it allows monetary independence. Flexible rate regimes allow more macroeconomic policy flexibility than more rigid exchange rate regimes. They can allow a country to pursue a different monetary policy than that of its neighbors, as it might want to do, for example, when it is at a different stage of its business cycle. In addition they can facilitate a country's adjustment to external shocks. Examples of such shocks are the swings in capital flows and terms of trade shocks that have been factors in recent crises.

Fixed exchange rates may undesirably reduce the perceived risk of foreign currency-denominated borrowing by banks and firms, by inducing the false belief that they face only one-sided uncertainty on the movements of the exchange rate. In contrast, more flexible exchange rates explicitly introduce two-way risk; the currency may depreciate as well as appreciate. This may help discourage the accumulation of unhedged foreign currency liabilities.

The three episodes of currency crisis in the 1990s occurred under regimes where exchanges rates were either fixed or kept in a narrow band. Semi-fixed exchange rate regimes and policies of exchange-rate based stabilization -- no less than floating regimes -- have at times led to real currency appreciations that worsened a current account deficit, and contributed to triggering a crisis. Exchange rate-based stabilizations may be more successful if the initial fixed rate anchor regime is followed by a crawling peg regime where the exchange rate is allowed to depreciate on the basis of the inflation differential between the domestic economy and the world. The experience suggests that maintaining protracted fixed rates in the aftermath of exchange rate-based stabilizations can lead to real appreciation (due to residual inflation) and deteriorating trade balances, which can eventually undermine fixed-rate regimes not bounded by consistent policy regimes. Some countries have made strong institutional commitments to a rigid fixed exchange rate regime; other countries could benefit from increasing flexibility during periods of macroeconomic and financial stability, when the move to flexibility may be less disruptive.

More work needs to be done to determine whether certain exchange rate regimes provide more stability in the presence of high capital mobility and the potential for sudden reversals of capital flows following changes in investors' expectations. In no case, can the choice of a particular exchange rate regime substitute for sound macroeconomic policies and strong financial systems as the foundations of true stability.

One form of fixed exchange rates even more extreme than a currency board is a monetary union, which solves the problems of credibility and speculation automatically. The next section discusses the prospects of the European Monetary Union and whether Europe represents an "optimal currency area."

Box 7-1. - Currency Boards

A currency board is a monetary institution that only issues currency that is fully backed by foreign assets. Its principal attributes include the following:

- an exchange rate that is fixed not just by policy, but by law
- a reserve requirement stipulating that each dollar's worth of domestic currency is backed by a dollar's worth of foreign reserves
- a self-correcting balance of payments mechanism, in which a payments deficit automatically contracts the money supply, resulting in a contraction of spending.

By maintaining a strict unyielding exchange rate, the government hopes to ensure credibility. By holding 100 percent reserves, it hopes to insure convertibility.

The first currency board was established by the British in Mauritius in 1849. The use of currency boards eventually spread to 70 British colonies. The purpose was to provide the colonies with a stable currency without the associated difficulty of issuing sterling notes and coins that were costly to replace if lost or destroyed. The colonies also benefitted from this approach in that they could earn interest on the foreign currency assets being held in reserve. The use of currency boards peaked in the 1940s and declined thereafter. [In the 1960s, many newly independent African countries replaced their currency board with a central bank, and most other countries followed suit in the 1970s.]

The introduction of currency board-like arrangements in Argentina (1991), Hong Kong (1983), Estonia (1992), Lithuania (1994), and Bulgaria (1997) constitutes a small resurgence in their use worldwide. A currency board can help to create a credible policy environment by removing from the monetary authorities the option of printing money to finance government deficits. Argentina, for example, has benefited from such credibility. Argentina was prompted to adopt a currency board [which it calls the convertibility plan] because of a dramatic hyperinflation in the 1980s and the absence of a credible monetary authority. Since 1991, Argentina has become a model of price stability and has achieved laudable growth rates, aside from the Mexican peso "Tequila"-induced recession in 1995, from which Argentina soon rebounded strongly. By most accounts, the currency board has worked for Argentina.

Characteristics that suit countries to be candidates for currency boards are: a small open economy, a desire for further close integration with a particular neighbor or trading partner, a strong need to import monetary stability due to a history of hyperinflation or an absence of credible public institutions, access to an adequate level of reserves, and a strong, well supervised and regulated financial system.

Currency board supporters are pushing for their wider use—in particular, for Indonesia, Russia, and Ukraine. In general, proclaiming a currency board does not automatically guarantee the credibility of the fixed rate peg as sometimes asserted. [Little credibility is gained from putting an exchange rate peg into the law, in a country where laws are not heeded or are changed at will.] A currency board is unlikely to be successful without the solid fundamentals of adequate reserves, fiscal discipline, and a strong and well-supervised financial system, in addition to the rule of law.

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3. EUROPEAN ECONOMIC AND MONETARY UNION

The European response during the 1990s to the challenges presented by exchange rate volatility and financial globalization has been to accelerate the economic and financial integration of the continent. As part of this process, eleven members of the European Union embarked in a project of monetary unification that took effect on January 1, 1999, with Stage Three of the process of European Monetary Union (EMU). As noted at the outset of the chapter, European integration raises some of the same analytical issues and policy challenges as integration of the emerging market countries into the world financial system.

THE EMU SCHEDULE

In the spring of 1998, a summit of European Union (EU) heads of government decided that EMU should proceed, as envisioned in the Maastricht Treaty of 1991. Initial members were selected upon assessments by the European Monetary Institute (the forerunner of the European Central Bank) and the European Commission, as to whether countries had met the Maastricht Treaty's convergence criteria. According to these criteria, members in the single-currency were required to have government deficits and total debt no higher than 3 percent and 60 percent of gross domestic product, respectively. Inflation rates and long-term interest rates within 1.5 percentage points and 2 percentage points of the average of the three countries with the lowest inflation and interest rates. Finally, members' currencies must also have stayed within the Exchange Rate Mechanism bands for two years.

The Maastricht Treaty required EU members to satisfy these criteria in 1997 to qualify as founding member of EMU on January 1, 1999. Twelve of the fifteen members of the EU wished to participate, and eleven of these were found to satisfy the criteria for membership. This, in part, reflected remarkable progress at fiscal consolidation, since the targets had seemed out of reach for members such as Italy a mere year or two in advance. Of the countries desiring membership, only Greece was deemed not to satisfy the criteria. Of the other three EU countries, the United Kingdom and Denmark opted not to join for the time being, while Sweden chose not to qualify by remaining out of the Exchange Rate Mechanism.

The remarkable convergence of financial conditions in the European countries is clear from the data on the 11 EMU countries' short-term and long-term interest rates (see Charts 6-3 and 6-4), showing that both sharply converged after 1996. Differences in interest rates across countries can be due to two major factors: a currency premium related to the risk of devaluation, and a country premium related to the possibility of default on the public debt. With monetary union starting in January 1999, short term interest rates converged as currency risk was eliminated and default risk is close to zero for very short-term public debt. Even after monetary union, differences among long-term interest rates may remain, as different EMU countries with different stocks of public debt may be perceived as having different default probabilities. However, long-term interest rates in the euro-11 area converged quite sharply by the fall of 1998 as well.

In July 1998, the European Central Bank came into existence. On January 1, 1999 the single currency, the euro, was created as the currency of the 11 EMU countries. The European Central Bank took control of monetary policy in all EMU countries. Existing national notes and coins will continue to circulate until euro cash is introduced although they are no longer separate currencies - they are "non-decimal denominations" of the euro, locked in at permanent conversion rates. (By analogy, most American dollar bills carry a circular seal with a letter inside denoting the Federal Reserve District from which they come. However, Europeans will continue for some time to be far more aware of the geographic origin of the currency they carry than Americans are.) Only in 2002, will euro cash (coins and notes) enter into circulation with national currencies being phased out. This transition period is necessary because central banks need time to print the banknotes and mint coins; retailers and banks also want time to prepare; and the public sector needs time to prepare as governments have to consider how to change their services over to the use of the euro.

While euro cash will be introduced only in 2002, in the three years between now and then many changes will occur. Government bonds issued after 1999 will have to be denominated in euro. Also, almost all existing issues of marketable government debt by the participating countries were redenominated in euros at the end of 1998. Moreover, several large European companies plan to begin accounting in euros in 1999. Such a move may lead smaller firms to follow. Even businesses who do not switch their internal accounting to euro may quote prices in euro for trading before 2002. Consumers and the public sector are likely to be using national currency units until 2002. In general, European governments agreed that there will be "no compulsion" and "no prohibition" in the use of the euro between 1999 and 2002.

BENEFITS AND POTENTIAL COSTS OF EMU

There are several potential benefits of EMU. Transaction costs in trade will be lowered as exchange rate risk and currency transactions within Europe will both be eliminated; and the ensuing goods market integration and price competition will be beneficial to consumers. Integrated European financial markets will be broadened and deepened. Inflation discipline will be preserved by an independent European Central Bank committed to price stability. It is hoped that fiscal discipline will also result since, as agreed in a Growth and Stability Pact, membership requires maintenance of disciplined fiscal policy. (According to the Pact, fines may be imposed on countries found to be running excessive deficits.) Participation in EMU eliminates national monetary policy and limits the scope of fiscal policies as a tool of stabilization policy. This loss of macroeconomic tools to address cyclical unemployment makes more urgent the need for

European structural reforms, e.g., to increase flexibility in the labor market. In this sense, it is to be hoped that EMU might serve as a discipline tool to nudge European countries to implement structural reforms more rapidly and eliminate impediments to sustained economic growth.

Creation of a large region of monetary stability is a commendable culmination of the 50-year economic, social and political integration that has taken place in Europe. Indeed, the original motivation for economic integration in Europe was to ensure that the countries in the heart of Europe, which had fought three wars over the preceding 100 years, never did so again. This is one reason why, in historical perspective, European integration has always been in the political interest of the United States. Even in an economic sense, the U.S. will benefit as a trading partner from strong economic growth and performance in Europe, which may be enhanced by the single currency project in the long run. As long as Europe remains open to trade, what is good for Europe economically is good for us.

However, EMU may also entail some potential costs. Most important, it entails a loss of monetary autonomy and the ability to use this tool to respond to "asymmetric" national shocks, unexpected economic developments that affect some countries differentially than others (i.e., idiosyncratic or country-specific events). Exchange rate changes are another instrument for coping with such shocks, but with EMU this tool will also no longer be available. Absent these tools, flexibility of wages and labor mobility across regions and industries are the major mechanisms of adjustment. But labor mobility is much lower among the nations of Europe than, for example, among the American states. Fiscal policy can also play a stabilization role but the rules for EMU membership constrain countries' ability to use such a tool. Finally, in Europe there is also little in the way of a central system of federal taxes and transfers to cushion against regional/national shocks as compared to the United States. Limited labor mobility, structural labor market rigidities, and decentralized and constrained fiscal policy could imply that Europe does not satisfy the criteria for an "optimal currency area" as well as do the regions of the United States. (These points are elaborated in Box 7-2 on Optimum Currency Areas).

Box 7-2 - Is Europe an Optimum Currency Area?

The theory of **optimum currency areas** provides a set of criteria to identify groups of countries which are likely to benefit from membership in a common monetary union. Some research suggests that the nations of the EU are less well-suited to a common currency than are, for example, the states of the United States. Nevertheless, Europe is becoming increasingly integrated over time, and this may tip the balance in the direction of satisfying the optimum currency area criteria in the future.

Common rather than national shocks. Why do countries ever need independent currencies? If a country (or other geographic region) suffers an adverse "shock," such as a fall in demand for its products, it may want to follow a more expansionary monetary policy, in order to stimulate demand and head off unemployment. Yet, if it does not have an independent currency, it will not be able to undertake monetary expansion. Conversely, only common shocks can be properly addressed by a union-wide monetary policy change.

For example, in the early 1990s Germany experienced a sudden increase in interest rates (which arose out of the unification of the country and the associated increase in West German spending in the Eastern lander). It was difficult for other European countries to accept this increase in German interest rates, because it did not suit their own economic conditions. The resultant strains broke apart Europe's Exchange Rate Mechanism in 1992-93.

High degree of labor mobility. Labor mobility is an important criteria for an optimum currency area: if a region has this means of adjustment, then it has less need for monetary independence. Consider a country or other geographical unit that gives up its monetary independence. Subsequently, in the event of an adverse shock, it might still have other ways of adjusting. One way of adjusting is that workers may move out, to other countries or regions with stronger economies. While this might not sound like an attractive solution, it turns out that inter-state migration is the most rapid means of adjustment to economic downturns within the United States (e.g., more rapid than adjustment of wage levels).

Labor mobility among European countries is much lower than in the United States. Thus, by the labor mobility criterion, European countries are less well-suited to a common currency than are American states.

Existence of a federal system of fiscal transfers. When disparities in income do arise in the United States, federal fiscal policy helps to narrow them. One recent estimate suggests that when a region's per capita income falls by one dollar, the final reduction in its disposable income is only 70 cents. The difference, a 30 percent federal cushioning effect, includes both an automatic decrease in federal tax receipts plus an automatic increase in unemployment compensation and other transfers. The cushioning effect has been estimated at 17 percent in the case of Canadian provinces. European countries have greater scope for domestic fiscal stabilization than do American states. Furthermore there are some cross-country fiscal transfer mechanisms. Nevertheless, neither the fiscal transfer mechanisms that are already in place within the European Union nor those that are contemplated under EMU -- so-called "structural funds" -- are as large as those in the U.S. or Canadian federal fiscal system.

Judged at least by these two optimum currency area criteria (labor mobility and fiscal transfers), the European Union is not as good a candidate for a monetary union as is the United States. European countries may be less adaptable than American states. This suggests that, if there are shocks in the coming decade that affect EU members differentially as did the German unification shock of 1990, those adversely affected could experience popular resentment against what -- for them -- will be the insufficiently expansionary monetary policies of the rest.

Prospects for EMU. There is good hope, however, for a successful EMU. The degree of integration among EU countries is increasing decade by decade. The degree of international labor mobility, for example, is likely to be higher in the future than in the past. The Schengen convention now allows free movement of citizens among a subset of European countries. Thus the European countries may come to satisfy the textbook criteria of an optimum currency area in the future, even if they do not fully now.

While such potential costs of EMU have some relevance, some of the objections to EMU have been exaggerated. First, while monetary policy can affect real economic activity in the short-run, it does not in the long-run. Therefore, monetary policy can do little in any case to address structural rigidities, such as labor market inflexibility and real wage rigidity that are generally thought to keep unemployment rates high in Europe in general and in depressed regions such as southern Italy in particular. These problems will have to be addressed by structural reforms with or without monetary union.

Second, the role of fiscal policy is also inherently limited in Europe, since fiscal deficits and debt-to-GDP ratios are still high for several countries. Fiscal retrenchment should continue in Europe with or without EMU; therefore EMU may not be a strong constraint. Third, asymmetric shocks and limited factor mobility may diminish over time as EMU leads to greater real integration among European economies (see Box 7-2). For example, as intra-European trade has grown and will further grow in response to with European integration and EMU, the creation of a common free market for goods, services and factors of production could make idiosyncratic national shocks less prevalent if it reduces the degree of spatial concentration of individual industries.

Finally, it has been argued that EMU is likely to exert discipline in favor of structural reform. As there will be no national monetary and exchange rate policies and fiscal policy autonomy will be constrained, the ability to use macro instruments to delay structural market reforms will be reduced; governments will have stronger incentives to pursue policies that further long-run economic growth. The opposite has also been argued, by some who fear that EMU will slow the drive to structural reforms. Since reforms are socially costly, the flexibility deriving from monetary, exchange rate and fiscal discretion can ease the transition costs as resources are reallocated. With EMU, the absence of these social "shock absorbers", may slow down the structural reform process. [In that scenario, the absence of the structural reform would continue, creating detriments to EMU.]

4.THE EURO AS AN INTERNATIONAL CURRENCY, AND IMPLICATIONS FOR THE U.S. DOLLAR

The formation of a monetary union in Europe is a positive development that could simultaneously benefit the continent, the United States and the world economy. Some have expressed a concern, however, that a strong European economy and the emergence of the euro as an alternative 'rival' international currency to the dollar is likely to harm the United States. Such concerns are mostly misguided. The U.S. has long benefitted from a prosperous, growing Europe, and since the Marshall Plan after WWII has supported the development of strong market economies on the continent.

With the development of an open and integrated economic area in Europe, the United States will benefit. American producers will be able to export to a very large, integrated European market with no cross-national restrictions to trade. U.S. firms producing in Europe will benefit from the lack of exchange rate volatility, common European standards for goods and services and a large open market. Indeed, U.S. corporations have more experience selling into a large unified market than do European corporations. American financial institutions in particular, who are already quite competitive in commercial and investment banking services and securities products, can benefit from the opportunities provided by the broadening and deepening of integrated European financial markets.

The emergence of the euro as a rival international currency should not be viewed with alarm for a number of reasons. Even if the euro emerges as an international currency strong enough to rival the dollar, the negative effects on U.S. economic welfare are likely to be small. Furthermore, the euro is unlikely to rapidly displace the U.S. dollar as a major international currency. International currency status does not automatically follow from a currency's possession of a large home-base. One might even argue that it is healthy for the world to have two or more currencies competing for the status of international currency, as a discipline on each.

The functions of an international currency

What does it mean to be a major international currency, and is it likely that the euro will become one? A currency has three main uses: it can be used as a means of payment; a unit of account; and a store of value. An international currency is simply one that is also used outside its home country for these three purposes. Within each of the three functions, an international currency has both official and private uses.

In money's *store of value* function, investors decide how much of their wealth to hold in the form of assets denominated in various currencies. Will public and private investors hold a fraction of their portfolio in assets denominated in euros? If yes, beyond the sum of the fractions previously occupied by the German mark and other disappearing European currencies, there may be large portfolio shifts leading to greater demand for euros. This could in turn possibly cause an appreciation of the euro. However, a higher share of euros in portfolios will depend on economic factors such as inflation rates in the euro area, confidence in the value of the euro relative to the U.S. dollar and the Japanese yen, the rate of return on euro assets, and economic growth in Europe, as well as political factors.

The official side of the store-of-value use is that currencies are held as foreign reserves by central banks. There is a possibility of greater diversification away from U.S. dollar towards the euro. In the 1970s and 1980s, the dollar's share of reserve currency holdings gradually shrank to make room for the mark and yen. This trend was suspended, or even reversed, in the 1990s, but could resume in the 2000s to make room for the euro. Such diversification away from the dollar would depend in part on the same risk-reward considerations as matter for private use. Countries with strong economic fundamentals, sound currencies and low inflation are more likely to have their currency used as an international currency. As long as the U.S. maintains a strong economy, the international demand for U.S. dollar will remain strong.

A *unit of account* is a reference scale for quoting prices, which is distinguishable from the actual currency in which assets are held or payments made. On the private sector side of the unit of account function, an international currency is used to invoice imports and exports. Presently, the U.S. dollar plays a dominant role in invoicing around the world, especially for primary commodities like oil. But invoicing will be mostly in euros within Europe. Also, the euro may be used widely in Central and Eastern Europe, the Middle East and Africa, areas of high and increasing trade with Europe.

One official use of international currencies that can be classified under the unit of account function is a major currency to which smaller countries can peg their exchange rate. Non-EMU European countries, particularly those in the East, are likely to consider pegging their currencies to the euro for two reasons: they undertake more of their trade and finance with the EU than with the U.S., and they aspire to eventual membership in EMU. If this happens, greater use of the euro as an intervention currency will increase official demand for euros. The unit-of-account, store-of-value, and means-of-payment functions are interrelated.

Currently, the dollar is used as the primary vehicle currency in foreign exchange trading which is one example of *means of payment.* A trader who wishes to exchange one minor currency for another is more likely to go through the dollar than to go through some other major currency, or to be able to find a counterparty for a direct "cross trade." (See Box 7-3 on the role of different international vehicle currencies.)

The private use of a currency as a means of payment in international trade and finance depends on economies of scale in payments systems. As in the case of a domestic currency, there are significant increasing returns to scale in payments: it is easier and cheaper to use the same currency that is used by everyone else. In this regard, the advantages of incumbency and inertia will favor the U.S. dollar even as the euro's natural home grows to be as large as that of the dollar.

Overall, while it is likely the euro will become an international currency, it is unlikely that the U.S. dollar will be replaced anytime soon in its role as leading international currency.

Is it good or bad to be an international currency?

Does it matter whether the dollar remains the leading international currency? One should not overemphasize the decidedly modest benefits that having an international currency provides to a country. Central banks' reserve currency holdings may have some implications for the determination of the exchange rate. But this is another question. What about the global role of the dollar per se?

Advantages of having a key currency

There are at least five advantages to a country of having its currency used internationally.

(1) Convenience for residents. It is certainly more convenient for a country's exporters, importers, borrowers and lenders to be able to deal in its own currency than foreign currencies. The global use of the dollar, as with the global use of the English language, is a natural advantage that American business tends to take for granted. [But the benefits from having one's country's currency used as a unit of account should not be overemphasized. Invoicing U.S. imports in dollars does not necessarily shift the currency risk from the buyer to the seller, as the dollar price sometimes can change quickly when the exchange rate changes.]

(2) More business for the country's banks and other financial institutions. There need be no firm connection from the currency in which banking is conducted to the nationality of the banks (nor from the nationalities of the savers and borrowers to the nationality of the intermediating bank). British banks, for example, continued to do well in the Eurodollar market long after the pound's international role waned. Nevertheless, it stands to reason that U.S. banks have a comparative advantage at dealing in dollars. Only U.S. banks have access to the safety net provided by U.S. regulatory authorities (access to the discount window, and so forth).

(3) Political power and prestige. The benefits of "power and prestige" are decidedly nebulous. Nevertheless, historians and political scientists have sometimes associated key currency status [and international creditor status], along with such non-economic factors as

colonies and military power, as trappings of great powers.

(4) Seigniorage. This is thought by some to be perhaps the most important advantage of having other countries hold one's currency. They must give up real goods and services, or ownership of the real capital stock, in order to add to the currency balances that they use. Seigniorage derives from the fact that the U.S. effectively gets a zero-interest rate loan when dollar bills are held abroad. Just as American Express reaps profits whenever people hold its travelers' checks, which they are willing to do without receiving interest, so the United States profits whenever people in Argentina or Russia hold dollars that do not pay interest. Wherever hyperinflation or social disorder undermine the public's faith in the local currency, the American dollar is the preferred alternative. (Illegal activities are another source of demand, of course).

A way to compute cumulative seigniorage is to estimate the stock of dollars held abroad, and multiply by the interest rate. Foreign holdings of U.S. currency are conservatively estimated at 60 per cent of total dollar currency in circulation. With total currency outstanding in mid-1998 at $441 billion, foreign holdings are about $265 billion. One simply multiplies by the Treasury bill interest rate, to derive the estimate that seigniorage currently runs about $13 billion a year. [This is implicitly a tax on foreign transactions that are intensive in dollar cash.]

(5) Ability to borrow in international capital markets in one's own currency. Some have argued that the U.S. ability to finance its current account deficit via foreign borrowing has been facilitated by the ability to issue dollar denominated liabilities. The concern has been expressed that such ability may be hampered by a loss of reserve currency status. This concern is probably overdone. First, many industrial countries whose currency is not a key currency are able to

borrow in domestic currency. Second, countries with larger current account deficits than the U.S. (as a share of their GDP) have regularly and persistently financed such imbalances with borrowing in foreign currency rather than their own domestic currency. Countries become unable to borrow to finance current account imbalance when such imbalances become unsustainable. The fact that borrowing may occur in domestic or foreign currency has little to do with such sustainability. [Financing the foreign debt in one's own country currency gives, in principle, the potential advantage of being able to debase the real value of such debt through inflation. But no one would recommend deliberately following such a destructive economic strategy, given the loss of credibility and the economic costs of high inflation that it would entail.]

Disadvantages of having a key currency

One can think of two disadvantages from the viewpoint of a key-currency country. They explain why Japan, Germany and Switzerland, have in earlier decades been reluctant to have their currencies held and used widely.

(1) Larger fluctuations in demand for the currency. Having one's currency held by a wide variety of people around the world might result in greater variability of demand, although such instability is more likely to follow from the increase in the degree of capital mobility than from key currency status per se. In any case, central banks are particularly concerned that internationalization will make it more difficult to control their money stocks. This problem need not arise if they do not intervene in the foreign exchange market. But the central bank may view letting fluctuations in demand for the currency be reflected in the exchange rate as being just as

undesirable as letting them be reflected in the money supply.

(2) An increase in the average demand for the currency. This is the other side of seigniorage. In the 1960s and 1970s, the Japanese and German governments were particularly worried about the possibility that if assets were made available to foreign residents, an inflow of capital would cause the currency to appreciate and render exporters uncompetitive on world markets. Some Europeans today express the same concern about the euro.

Box 7-3. How does the dollar rank against other international currencies (pre-euro)?

Most measures show a gradual decline in international use of the dollar in recent decades. Reserve currency use, perhaps the most important measure, is shown in Figure 7__. The dollar's share of central bank reserve holdings declined from 76.1 % in 1973 to 56.0 % in 1990. Central banks gradually shifted their portfolio shares into marks and yen. But the dollar's share in reserve holdings has been relatively flat in the 1990s, amounting to 61 % in 1997.

Other major measures of international currency status, on the eve of the birth of the euro, are shown in Table 7.1. Overall, they tend to show the same thing: the dollar still on top, despite a gradual decline in its use versus the mark and yen over the last thirty years. The dollar is still more important than its three or four rivals combined.

• The first column reports the popularity of major currencies among smaller countries choosing a peg for their currencies. It is still the case that no currencies anywhere are pegged to the yen. Three currencies (those of Estonia, Bulgaria, Bosnia) were pegged to the mark last year, however. Elsewhere (Africa) the French franc was still the most common choice as a peg (29 per cent of peggers), owing to a special set of arrangements with the French Treasury, after the dollar (39 per cent). The euro is inheriting this role of the mark and franc. The dollar share should automatically go down in 1999 as the EU-11 are for the first time counted as pegging to each other.

• 87 percent of trades in the foreign exchange market in April 1998 involved the dollar, as the currency either bought or sold (see third column of the table). This figure (like the share of reserves held in dollars) should automatically go up in 1999, as EMU eliminates intra-European transactions among member currencies.

• The various measures of use of currencies to denominate private international financial transactions -- loans, bonds, and deposits -- still showed the dollar as the dominant currency, with a 54 percent share.

• Figures on the use of international currencies as substitutes in local cash transactions, are not generally available. The two leaders have been the dollar, for which internationally-circulating cash has been estimated by the Fed at 60 percent of U.S. currency outstanding, and the mark, for which international circulation has been estimated by the Bundesbank at 35-40 percent of German currency outstanding.

What are the determinants of international currency status?

Will the dollar in the future maintain its global role? There are four major sorts of conditions that determine whether a currency is used internationally.

(1) Patterns of output and trade. The currency of a country that has a large share in

international output, trade and finance has a natural advantage. The U.S. economy is still larger than the euro-11 economies combined. If Britain and the other remaining EU members (Sweden, Denmark and Greece) join in the future, however, the two currency areas will then be very close in size.

(2) History. There is a strong inertial bias, in favor of using whatever currency has been the vehicle currency in the past. An individual (exporter, importer, borrower, lender, or currency trader) is more likely to use a given currency in his or her transactions if everyone else is doing so. For this reason, the world's choice of international currency is characterized by "multiple stable equilibria." The pound remained an important international currency even after the United Kingdom lost its position as an economic superpower early in the century. In the present context, the inertial bias favors the continued central role of the dollar.

(3) The country's financial markets. Capital and money markets must be not only open and free of controls, but also deep, well-developed and liquid. The large financial marketplaces of New York and London clearly benefit the dollar and pound relative to the deutschemark and yen. It remains to be seen whether EMU will turn Frankfurt or Paris into one of the top few financial centers.

(4) Confidence in the value of the currency. Even if a key currency were used only as a unit of account, a necessary qualification would be that its value not fluctuate erratically. As it is, a key currency is also used as a form in which to hold assets (firms hold working balances of the currencies in which they invoice, investors hold bonds issued internationally, and central banks hold currency reserves). Here confidence that the value of the currency will be stable, and

particularly that it will not be inflated away in the future, is critical.

The monetary authorities in Japan, Germany and Switzerland, in the 1970s established a better track record of low inflation than did the United States, which helped their currencies to achieve greater international currency status. Given the good U.S. inflation performance more recently, this is no longer such a concern.

What is the prognosis for the dollar and the euro?

In light of these desiderata for a would-be international currency, is it likely that the euro will rival the dollar as the leading international currency? The euro automatically inherits the roles of the ecu, DM, french franc, and other EMS currencies. Subsequently, the euro's share will probably gradually rise, to move in the direction of "Euroland"'s share of output.

The odds are against the euro's rapidly supplanting the dollar as the world's premier currency. It is not that the dollar is ideally suited for the role of everyone's favorite currency. At least one characteristic mars its appeal: the United States is a debtor country with a large current account deficit. But an international currency is one that people use because everyone else is using it. Two of the four determinants of reserve currency status -- developed financial markets and historical inertia -- support the dollar over the euro. The third, economic size, is a tie (or will be if the United Kindom joins). The fourth determinant is also a tie as both Euroland and U.S. have pursued stable monetary policies aimed at maintaining a low rate of inflation.

While the widespread use of the U.S. dollar as international currency -- for holding reserves, pegging minor currencies, invoicing imports and exports, and denominating bonds and lending -- is testimony to the strength of the U.S. economy and the confidence with which it is viewed around the world, the direct economic benefits deriving from this international role are limited. The welfare of a country is measured by its ability to produce a large quantity of goods and services and provide a sustained increase in real income and consumption opportunities for its citizens. Whether a country's currency is an international currency or not has little to do with such long-run well-being, as the experience of many successful economies whose currencies do not have international roles attests. A strong and healthy U.S. economy that is a leader and champion of sound economic policies has led - as a by-product- to a strong international role for the U.S. dollar.

[To summarize, the introduction of the euro in January 1999 instantly created an international currency that potentially rivals the dollar. The standard measures of international currency use will show a euro that inherits roughly the sum of its constituent currencies. Subsequently the dollar will probably lose share gradually, as it lost share in the 70s and 80s to the mark and yen. There may be some small associated costs for the U.S.. But there is no reason to expect the euro to surpass the dollar anytime soon, nor for the costs from the U.S. viewpoint to outweigh the political and economic advantages to a successful EMU.]

5. CONCLUSION

Reforms are desirable to create a strengthened international financial architecture for the global market-place in the next millennium, one that captures the full benefits of international capital flows and global markets, minimizes the risk of disruption, and better protects the most vulnerable.

The United Stated has worked intensively with key emerging markets, other industrialized nations, and the relevant international organizations, to put in place the building blocks of this new architecture. The reforms recommended by the G22 and adopted by the G7 are an important starting point. The United States and its G7 partners also agreed to do more to build a modern framework for the global markets of the 21st century and to limit the swings of boom and bust that destroy hope and diminish wealth. Thus, they also committed to initiate new work on a number of other important areas to identify additional steps to strengthen the international financial architecture. All these reforms will ensure that the unprecedented growth, increase in welfare and opportunity experienced in the 50 years after the creation of the Bretton Woods system are maintained in the future.

Meanwhile, the United States salutes the formation of the European Monetary Union. The United Stated has much to gain from the success of this momentous project. Now more than ever, America is well served by having an integrated and prosperous trading partner on the other side of the Atlantic. Europe should benefit from a single currency that supports these ends -- and if Europe benefits, this will greatly benefit the United States.

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Nouriel Roubini (CN=Nouriel Roubini/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME:11-JAN-1999 10:38:17.00

SUBJECT: Re: New Comments by Treasury on Chapter 7

TO: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
Janet, I forward to you the comments by Treasury on Chapter 7 that I just received this morning.
Nouriel

---------------------- Forwarded by Nouriel Roubini/CEA/EOP on 01/11/99 10:35 AM ---------------------------

"SETSERB%DOM13.DOPO8" <BRAD.SETSER @ treas.sprint.com>
01/11/99 08:04:51 AM
Record Type: Record

To: Nouriel Roubini/CEA/EOP
cc: "atkinsonc%Dom13.DOPO8" <CAROLINE.ATKINSON @ treas.sprint.com>, "goodmanm%Dom13.DOPO8" <Mary.Goodman @ MS01.DO.treas.sprint.com>
Subject: Re: Chapter 7 -Reply

Date: 01/11/1999 08:51 am (Monday)
From: Brad Setser
To: EX.MAIL("Nouriel_Roubini@cea.eop.gov")
CC: atkinsonc, goodmanm
Subject: Re: Chapter 7 -Reply

Nouriel --

1/ could we get a copy of chapter 6 too ...
2/ good job. much improved.
3/ I am faxing over some line edits, as is Caroline.
4/ But it still needs to be shorter ...

In additional, Caroline broadly agrees with the following, more general, comments. Please let me know if you have difficulty deciphering my "big" fixes.

My major suggestions are:

1/ Section on WG 3 needs to have a bit more on official finance in its second para before it launches into the discussion of private sector involvement. Wg3's ex. summary and introduction both had a para upfront about importance of official finance to catalyze restoration of confidence, etc ... idea is to make this section sound less like mug the private sector and the section on new ways of responding to crisis later on sound less like a section on the case for a LOLR. i.e make more both times when you need money, times when you need private involvement.

2/ I have suggested in my line edits a major pruning of section on strengthened prudential reg in indsutrial countries. The basic idea is that
a description of issues in enhanced int. final surv, basle cap, accord and hedge funds is fine, but that prescriptions should be cut.

3/ on the section on stengthened prudential reg and financial systems + orderly liberalization, I would do the following, which both shorted the section and eliminates seperate headings for controls on outflows and improved macro, thus bringing closer to G7 statement

-- I would put a para against controls on outflows upfront (on p.25), after "some nations have been tempted to tun inward" and get rid of the seperate section on controls on outflows. I would go something liek -- some countries have been tempted to turn inward. It has been argued that cap. controsl provide an additional degree of macro policy freedom. However, cap controls in this context have a number of major problems (go into details). Whiel reintroducing controls on ouitflows in a crisis to
prvide additional macro fvlexibility, and trting to turn the clock backwards
is not, inour view, the way to go, we do think it is important to find ways to make countries more resilient to changes in the international market environment and less vuln to large swings in cap. flows. Right way to do this is ... something on opening to more stable flows like FDI, prudential reg on banking system, orderly liberalization of cap. account and maybe controls on inlfows, which differ fundamentally from controls on outflows .... " (this structure follows the structure I used in the talking
points for POTUS in KL on this subject)

-- also get rid of the section label on improving macro and other policies
(a policy area not explicitly mentioned in the G7 statement), but keep the language at the end. Something along the lines of "need stronger financial policies to benefit from global markets, but also need sound macro policies in general. In additoinal to adopting policies to strengthen
financial systems, important to have consistent monetary and exchange polciies and sound policies for the management of public debt, i.e. avoid going for cheaper but dangerous options and pay more for a bit of insurance.

These changes would focus this section more on the areas identified in the G-7 communique, while keeping the basic ideas in the section labels that I have tried to eliminate.

4/ Section on new ways to respond to crisis -- eliminate section on "logic of a precautionary facility (basically, makes the run on countries are kind of analogous to runs on banks argument, which RER does not like), taking the paras on the botton of, 34 and top of p. 35 and integrating them more into the para on 33 on new structures of official finance (I have specific changes to suggest). This woudl eliminate most of p.34.

5/ On IMF refor, go over the reforms the G7 agreed as part of deal to get IMF funding through congress, talk a bit about continued need to make IMF more responsive, more transparent, etc

6/ Should use RER speech to World Bank at Annual meetings (or aks Joe Eicherberger to provide new language) for more on minimizing the social cost of crisis.

7/ On exchange rates -- delete first full para on p. 39 (currency boards, whcih are addressed in more detail in his box so para not needed) and first full para on p.40 (too honest for this document). Also have some other small reorganizations to suggest. But in general, I found this section to be much improved

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Janet L. Yellen (CN=Janet L. Yellen/OU=CEA/O=EOP [CEA])

CREATION DATE/TIME:11-JAN-1999 08:43:06.00

SUBJECT: Re: erp - climate change section

TO: Alan S. Polasky (CN=Alan S. Polasky/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

CC: Jeffrey A. Frankel (CN=Jeffrey A. Frankel/OU=CEA/O=EOP @ EOP [CEA])
READ:UNKNOWN

TEXT:
I very much like the redrafted section. I attach my version of it which
incorporates at most a changed word or two.=================== ATTACHMENT 1
===================
ATT CREATION TIME/DATE: 0 00:00:00.00

TEXT:
Unable to convert ARMS_EXT:[ATTACH.D36]MAIL46158401M.036 to ASCII,
The following is a HEX DUMP:

Innovation and Diffusion: An Application to Climate Change Policy

Policies to address the threat of climate change, due to the long-run nature of this environmental problem, will require the abatement of greenhouse gas emissions over decades and even centuries. Under these circumstances, the impact of environmental regulation to address the problem on the incentives to innovate cannot be ignored. The ultimate cost of global efforts to address this environmental challenge will depend importantly on the pace at which such innovation takes place. The Administration's efforts to address climate change therefore incorporate many of the principles discussed above to create appropriate incentives to promote innovation and speed diffusion of new technology. These efforts are reflected both in achievements in international negotiations and in domestic actions.

BOX: Burning down the house

Emissions of greenhouse gases, primarily from the burning of fossil fuels and deforestation, have led to a 30 percent increase in the atmospheric concentration of these gases above levels prevailing prior to the industrial revolution. If emissions continue along their projected "business as usual" path, a doubling of greenhouse gas concentrations from pre-industrial revolution levels is likely midway through the next century. According to climate models, this could lead to global warming of between 1.8 and 6.3 degrees Fahrenheit by 2100. Potential impacts include a rise in sea level, greater frequency of severe weather events, shifts in agricultural growing conditions due to changing weather patterns, changes in the availability of freshwater supplies, threats to human health from increased range and incidence of disease, and damage to ecosystems and biodiversity.

To address the risks of climate change, United Nations member countries have participated in a series of international negotiations including conferences in Rio de Janeiro in 1992, Kyoto in 1997, and most recently Buenos Aires in 1998. Building on the 1992 United Nations Framework Convention on Climate Change, the Kyoto Agreement places binding limits on emissions of greenhouse gases over the 2008 to 2012 period in industrial countries. The Agreement contains several features that may promote cost-effective reductions of these gases, including the flexibility to trade emissions reductions across gases, provisions allowing for international trading of emissions allowances among countries assuming binding emissions limits, and opportunities to invest through the "Clean Development Mechanism" in clean-energy projects in developing countries that generate emissions credits for use in industrialized countries.

The Kyoto Agreement embodies the Administration's preference for incentive-based environmental regulation through its emphasis on international emissions trading. As noted, an incentive-based approach should provide firms with strong inducements to find low-cost methods of reducing or sequestering greenhouse gas emissions. By "getting prices right" this approach also stimulates the diffusion of existing technologies as well as providing private sector incentives for R&D for the next generation of technologies. In addition, announcing emissions targets well in advance may produce payoffs akin to those of a technology-forcing standard. This approach provides incentives for firms to innovate while allowing them time to adjust by replacing depreciating plants with equipment incorporating new technology, thereby further lowering the cost of emissions reduction.

In conjunction with the international trading system proposed under the Kyoto Agreement, the Administration supports developing a domestic greenhouse emissions trading program for the 2008 to 2012 commitment period. A domestic trading program, in conjunction with international emissions trading, would allow U.S. firms to participate in international trading of greenhouse gas emissions, resulting in an efficient, low cost national abatement strategy.

Because 85 percent of domestic greenhouse gas emissions come from the burning of fossil-fuels, achieving climate change policy goals will require improving the energy efficiency of the economy. The rate of energy efficiency improvement (EEI) across the economy can be thought of as the sum of three factors: market-induced energy efficiency improvement, policy-induced energy efficiency improvement, and autonomous energy efficiency improvement. Market-induced improvement reflects the effect of changes in energy prices on consumption decisions. Policy-induced improvement reflects the effects of policies on energy consumption. The autonomous component of energy efficiency improvement is that part that would take place even in the absence of policy and market price changes. The gradual structural shift in the United States economy away from basic manufacturing (and agriculture) toward services, which are less energy-intensive, appears to dominate this component.

Box: Energy Efficiency since the 1970's

Energy efficiency in the United States is now much greater than it was at the time of the first oil shock 25 years ago. Nevertheless, the United States consumes more energy than it did in 1973. The ratio of energy use to GDP (BTU/$), which is a measure of the energy intensity of output, fell rapidly in the 1970s and early 1980s, but stopped declining in the late 1980s. More recently the ratio has again begun to decline (see chart 5-2). Despite these efficiency gains, total energy use rose by 27 percent between 1973 and 1997 (see chart 5-3), stimulated by population growth and rising per capita GDP. Virtually the entire increase came after 1986, a period of relatively low energy prices. Before 1986, relatively high energy prices had kept energy use flat.

One of the most dramatic increases in energy use has been in the motor vehicle transportation sector, where annual vehicle fuel consumption rose 55 percent between 1970 and 1996. The average fuel-efficiency of new passenger cars more than doubled between 1973 and 1996, from 14.2 to 28.7 miles per gallon. Despite this impressive gain in fuel-efficiency for passenger cars, overall fleet fuel-efficiency has not increased as much because of the shift toward light-duty trucks and sport-utility vehicles. In addition, efficiency gains were partially offset by an increase in miles traveled per vehicle and a large increase in the total number of vehicles. The net effect of all of these changes has been a small decline in fuel use per vehicle but a large increase in energy consumption due to the increase in the number of vehicles (see chart 5-4).

In the residential sector, by contrast, energy use has declined as efficiency gains have more than outpaced increases in the number of households, in average house size, and in the average number of appliances per household. For example, the efficiency of the average new refrigerator improved 192 percent from 1972 to 1996. Per household energy use declined rapidly in the late 1970s and early 1980s but has been stable since.

Policies can provide incentives to invest in energy efficient technologies and increase the rate of energy efficiency improvement through price changes. For example, the Administration's economic analysis on climate change found that a tradable permit program that results in permit prices of $23 per ton of carbon would increase the annual rate of energy efficiency improvement approximately 25 percent above the level projected for the next two decades without such policy.

In addition to policies affecting energy prices directly, the Administration believes that a strong argument can be made for policies to stimulate innovation and diffusion through R&D and appropriate fiscal incentives. The President's Fiscal Year 2000 budget includes continued funding for the Climate Change Technology Initiative (CCTI), a program designed to spur the development and adoption of new energy-saving and carbon-saving technologies through tax incentives and R&D investments. Many of the components of the CCTI reflect recommendations made in a 1997 report by the President's Committee of Advisors on Science and Technology. The Committee found that "the inadequacy of current energy R&D is especially acute in relation to the challenge of responding prudently and cost-effectively to the risk of global climatic change from society's greenhouse gas emissions." By providing public support for energy R&D through the CCTI, the level of innovation will likely increase, offsetting in part the appropriability problems associated with this type of R&D.

The proposed FY2000 CCTI package contains $X billion over the 1999-2003 period in tax credits for energy-efficient purchases and renewable energy, including tax credits of $3,000 to $4,000 for consumers who purchase highly fuel efficient vehicles, a 15 percent credit (up to $2,000) for purchases of rooftop solar equipment, a 20 percent credit (subject to a cap) for purchasing energy-efficient building equipment, a credit up to $2,000 for purchasing energy-efficient new homes, an extension of the wind and biomass tax credit, and a 10 percent investment credit for the purchase of combined heat and power systems. The package also contains $X billion over this five-year period in additional research and development investments -- covering the four major carbon-emitting sectors of the economy (buildings, industry, transportation, and electricity), and carbon removal and sequestration. The FY2000 proposal builds on the FY1999 budget, which included more than $1 billion in CCTI R&D funding. The

FY1999 budget represents a 25% increase over the FY1998 climate change R&D appropriations. (CONFIRM TAX INCENTIVE PROPOSAL FOR FY2000)

Complementing these fiscal measures, the federal government can undertake other actions to promote the diffusion of climate-friendly technology. In October 1997, the President called for a series of steps to reduce energy use in Federal buildings, transportation fleets, and other equipment purchases, and to promote the use of renewable energy sources. As the nation's largest single energy user, the federal government spends nearly $8 billion each year for power to operate facilities, vehicles and industrial equipment, and more than 90% of this energy derives from fossil fuels. The federal government plans to expand its procurement of renewable and less carbon-intensive fuels. These efforts will accelerate the diffusion of new energy efficient and carbon-lean technologies. Further, the federal government's experience with these technologies should facilitate diffusion by demonstrating their applicability and feasibility for other users.