

Macroeconomic and Industry Level Implications of Alternative Macro, Trade, and Industry Policies New NIRA-LINK Model Simulations

By

F. Gerard Adams*, Byron Gangnes**, and Shuntaro Shishido***

Abstract

Changing conditions in the world economy and new policy initiative possibilities, particularly with the coming of a new Administration in the United States, suggest the need for another round of policy simulations with the NIRA-LINK model system. Much model simulation work, using a variety of models, is already underway to evaluate alternative policies in the United States and in the world economy¹.

For this kind of work, the NIRA-LINK system, encompassing the Wharton Annual and Industry Model of the United States, the FAIS/IUJ Multisector Model of Japan, and the LINK system to handle the rest of the world, has some special advantages. The NIRA-LINK system provides a disaggregated industrial sector linkage between the economies of the United States and Japan and consequently can deal directly with interrelationships between the two economies on the industry level. At the same time, the detailed models of the two countries are integrated into the LINK world model system so that impacts on and feedbacks from the rest of the world economy are taken into account (though not at an industrially disaggregated level).

The objective of this paper is to produce scenario simulations designed to examine policy alternatives leading to improved economic performance on a worldwide basis. We begin by considering the economic objectives of individual countries and of the world economy. Then we consider a baseline forecast scenario incorporating policies of the new Clinton administration as proposed during the past few weeks. We then compare alternative policies to this baseline projection, seeking policy scenarios that aim, to the extent possible, to achieve the policy objectives of the major countries and of the world economy.

The simulation projections include:

1. *A Baseline Forecast* of the policies of the new Clinton administration focusing on a) improvement in the budget deficit situation, b) short term cyclical stimulus measures, and c) policies designed to improve the nation's long term economic performance. (An alternative simulation with a strong fiscal stimulus is also included.)
2. *International Concerted Action* scenarios, assuming policy coordination between the major countries aimed at achieving their joint objectives.
3. *Trade Balance Improvement* scenarios incorporating various approaches to ameliorating the imbalance in trade between the United States and Japan.

1. National and World Economic Objectives

Recent developments in the world economy remind us again of the difficulty of managing economic policy and of coordinating policies to obtain an optimal joint outcome for many countries. The recession in the United States and the twin deficits of the budget and international payments

Manuscript received June 7, 1993. Revised August 23, 1993.

* University of Pennsylvania, ** University of Hawaii at Manoa, *** International University of Japan

¹The WEFA Group has used the Wharton Quarterly Model for studies of policy alternatives for the Clinton administration (see, for example, Wescott and Karl, 1992) [6] and similar work is underway in Project LINK.

pose a threat not only to economic conditions in the United States but in other countries as well. Now that the U.S. economy appears on the verge of at least modest recovery, government officials are trying to deal with the budget and trade deficits and with the problems of slow productivity growth. At the same time other countries are encountering a bout of recession. Japan faces a slowdown based on a decline of asset values at the same time that it continues, or even accelerates, its trade surplus growth. The European Community is challenged by recession in the United Kingdom and, apparently now also in Germany and France, while interest rates remain at high levels to guard against inflation. Only in the past few weeks has the German Bundesbank begun cautiously to lower interest rates.

The principal targets of the Group of 7 countries, individually and by all of them as part of an interrelated economy, may be summarized as:

- How to accelerate the recovery and employment in the United States and to prevent further recession and unemployment in Europe and Japan,
- How to speed up the process of long term economic growth, particularly in the United States and in Europe,
- How to deal with the imbalances in budgets and trade that still bedevil the world economy (particularly with the budget deficit in the United States and the trade surplus in Japan), and
- How to keep inflation at its recent moderate level.

While many economists would put primacy on the objective of long term growth, political imperatives make short term stabilization, employment, and price stability very important in the agendas of the world's economic policy makers. Appropriate equilibria in government budgets and in international trade balances are intermediate objectives, desirable not in their own right but as necessary (though clearly not sufficient) conditions, for long run economic stability and growth².

Managing macroeconomic policy involves four important dimensions:

1. The tradeoff between economic objectives,
2. The need to reconcile short term and long term aims,
3. Meeting the needs of particular sectors in a manner consistent with macroeconomic objectives, and
4. Reconciling national objectives with the broader aims of the community of the world's economies.

The tradeoff between objectives has been seen as a classic problem of economic policy making. Currently inflationary pressures have eased in most of the world as a result of recession. But the tradeoff has not been forgotten. Indeed in Germany, the Bundesbank's hesitation to cut interest rates, reflecting its fears of inflation, has called into question the viability of the European Monetary System and the health of the Community economy.

The problem of reconciliation over time is particularly evident in the current American debate over fiscal stimulus. Providing cyclical expenditure stimulus, something that the voters are anticipating, might well modestly improve economic activity and help unemployment in the short run. But it risks a further deterioration of the budget deficit and, as a consequence, a maintenance or even increase in already high long term interest rates, with potentially damaging implications for the economy over the longer run.

The third issue, that of reconciling industrial and sectoral interests with macroeconomic objectives tends to be accorded less weight in academic circles than in political discussion.

²Equity in the income distribution is also an important objective. Unfortunately, few macroeconomic models are able to deal realistically with income distributional effects.

It is nevertheless an important reality. Fiscal, monetary, and trade policies have important impacts on particular industries, the automobile industry in the US-Japan case, for example. In turn, industry specific policies, being considered as a means to improve productivity and international competitiveness, have important consequences on the macroeconomic level. (These considerations are an important part of our work with the NIRA-LINK model which has been designed specifically to handle such issues.)

Finally the fourth question, that of international coordination, is vividly illustrated by the problems of the European countries that have resulted from German reunification and the Bundesbank's tight monetary policy response. It is also becoming very relevant to the relationship between the United States and Japan, whose bilateral trade disequilibrium exceeds \$50 billion and is going even more sharply out of balance as a result of the slowdown in Japan at a time when recovery is beginning in the U.S. Can policies in the two countries be coordinated to reduce the trade imbalance without adverse macroeconomic impacts or without recourse to protectionism? That is a central question in our simulations below.

2. The Baseline Forecast Solution

The most recent version of the NIRA-LINK model encompassing the US, Japan, and the rest of the world economy has been used for these simulations. As described in detail in Adams, Gangnes, and Shishido (1993 forthcoming) this model comprises the industrially disaggregated Wharton Annual and Industry Model (Wharton Long-Term Model) for the United States, the newest version (G-2) of the FAIS/IUJ Multisector model for Japan³, and the LINK system of models for the rest of the world⁴. The United States and Japan are linked together through disaggregated trade equations, while the rest of the world retains the four sector disaggregation of Project LINK. This makes it possible to evaluate the effects of policies on the industry level in the US and Japan.

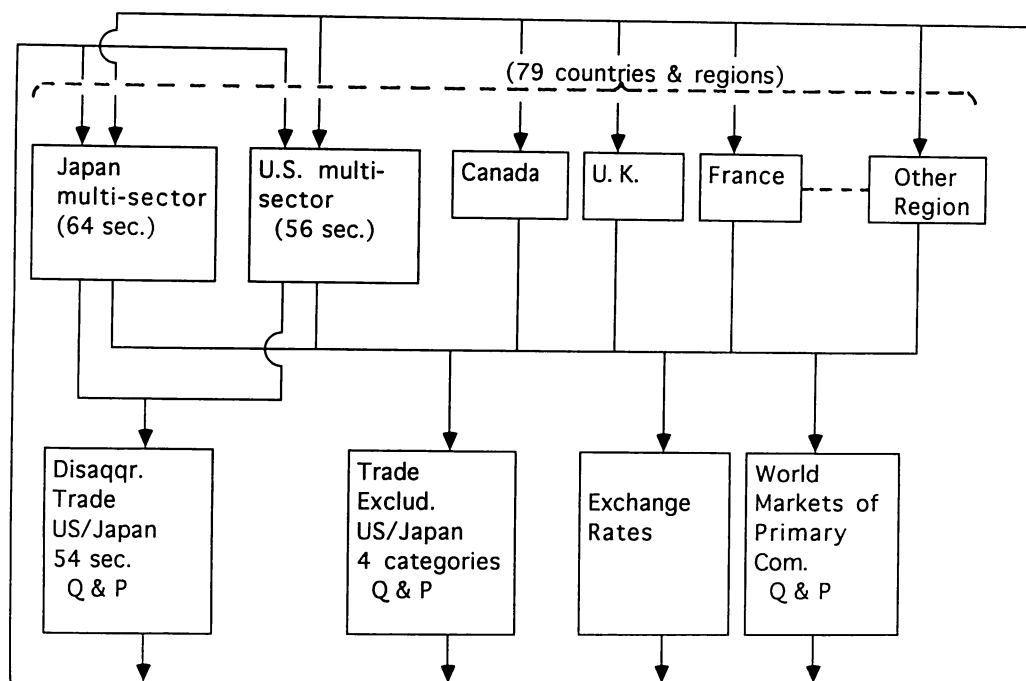
As indicated in Figure 1, the United States and Japan models, full-fledged multisector models with Leontief framework, are substituted for Wharton Quarterly Model and Osaka University Macro Model, respectively, which are currently used in the Project LINK system linking 79 countries and regions through four trade matrices of SITC categories (0-1, 2-4, 3, and 5-9). As compared with other global models, the model is unique in terms of the content of industry level disaggregation of output, employment, investment, prices, and trade for the United States and Japan and its extensive coverage of 79 countries and regions. The number of equations, including the United States model (2,300) and Japan model (3,200) totals about 31,000.

The model system has been aligned on recent historical data, supplemented with policy and forecast assumptions, to provide an appropriate starting point during the 1991-92 period for our simulations over the 1993 to 1994 forecast and simulation horizon. This baseline projection assumes policies that are now in place and it projects forward Clinton Administration policies so far as they are presently known (February 1993). We began our simulations by developing a pre-Clinton forecast. Then we added modifications due to policies being proposed by the Clinton Administration. These policies include:

- Increases in government investment spending amounting to \$20 billion phased in over 1993 to 1994.
- Reductions in defense expenditures of \$80 billion, from previously budgeted levels, phased in over the period 1993 to 1996.

³Shishido and Nakamura (1992) [5].

⁴Earlier discussions of the model are given in Adams and Shishido (1987)[1] and Adams, Gangnes and Shishido (1990)[2], (1992) [3], and (1993) [4].



Note: Q & P denotes quantity and price

Figure 1: Flow Chart of NIRA/LINK Model

- Additional personal income taxes, raising the marginal rate on high income people (corresponding to income of \$75,000 or above) by 5 percentage points, with a 10% surcharge on incomes above \$250,000.
- An increase in corporate income taxes of 2 percentage points, from 34% to 36%.
- Taxes on fuel, imposed gradually, and rising to approximately \$20 billion by 1996. (Prospective taxes on tobacco and alcohol have not been included. They will be fully offset by expenditures on health care.)
- Further reductions in US interest rates of approximately 100 basis points as a result of the improved budget outlook.

For Japan, the baseline follows closely recent forecasts of the WEFA Group and Project LINK.

The objectives of this policy scenario are to provide moderate noninflationary cyclical recovery over the 1993 to 1996 period while at the same time making some significant progress toward budget balance. After 1996 the prediction of policy becomes more difficult since policy makers react to the economic environment prevailing. This is the standard problem of long term forecasting. Consequently the base solution for the out years of the forecast, 1997 to 1999, is for an extension of present policies so long as they do not cause the economy to deviate excessively from the objectives of moderate noninflationary growth⁵.

⁵ While we have sought a realistic baseline, this is a projection, not a forecast. Nevertheless we have not eliminated the natural cyclical tendencies of the model. For example, we see a substantial cyclical swing in 1999. When we consider the *impact* of alternative policies, we compute the difference between an alternative solution and the baseline. In most cases, the precise position of the baseline solution will not make a substantial difference in the impact effect obtained.

The principal dimensions of the baseline forecast are shown in Table 1 A to D. The following are the notable macroeconomic dimensions of the forecast: (In each case below, Table A shows macroeconomic statistics for the United States, Japan and world. Table B shows trade flows for the US, Japan, and rest of the world regions. Table C summarizes economic activity by the world regions. Table D summarizes industrial impacts on output and employment in the United States and Japan. For the Baseline solution, we show the level values. For the alternative simulations we show only the differences from the Baseline, though we may refer to the levels in the text. All Tables are presented at the end of the paper.)

For the United States:

- Short run economic recovery for the United States during 1993 to 1994 at an annual rate around 3 percent.
- Continued expansion with some cyclical variation beyond 1994 between 2 and 3 percent annually. The deflationary impact of deficit reduction becomes apparent particularly in the 1995 to 1996 period. (An alternate simulation that aimed at elimination of the deficit by 1996, would drive the US economy close to recession in the 1995 to 1996 period.)
- The unemployment rate falls gradually to 6 percent and fluctuates near that level during the remainder of the forecast period.
- Continued moderate inflation between 3 and 4 percent during 1993 and 1994, rising between 4 and 5 percent annually for the remainder of the decade.
- Deficit reduction amounting to \$100 billion between 1993 and 1995. As we note above, this represents only a partial redressment of the deficit, but it is probably all that is attainable within the constraints of the GNP growth policy aims. After 1995, the deficit declines further to a value of approximately \$50 billion by the end of the decade.
- Trade statistics show US exports rising an average of approximately 9 percent in nominal terms (4 to 5 percent in real terms) throughout the decade. US imports rise a little more rapidly so that the trade balance tends to worsen gradually in nominal terms. Such a result may be difficult to avoid if the US is to maintain the desired moderate rate of GNP growth.
- At the industry level (Table 1 D) this base solution shows cyclical recovery for the most business cycle sensitive sectors, for example automobiles, aircraft, construction, electrical and nonelectrical machinery. Growth of industry is somewhat slower in the second half of the decade.
- Employment trends are a little less favorable than industrial expansion because of gains in productivity, particularly during the cyclical expansion. Growth of employment in services continues at a moderate rate, but there is no evidence that the US is becoming a more service oriented economy during this recovery period.

For Japan :

- The base solution growth rate is projected at around 3 to 4 percent per year beginning with a cyclical recovery in 1993 and then over the forecast period. The normal cyclical rebound is assisted by growing exports recovering economies abroad.
- The trade balance continues to expand during the forecast with a gradual increase from over \$100 billion in 1992 to over \$200 billion annually toward the end of the decade. This suggests the need for policies to reduce the trade surplus.
- After the cyclical slowdown, industrial trends favor machinery, automobiles, and other high tech industries. With the exception of the machinery industry, gains in employment remain quite moderate.

For the Rest of the World:

- Economic activity on a world basis averages out to a 3 to 3.5 percent growth path. For the other industrial countries growth is moderate at only 2 and a half percent annually, so that the baseline forecast, even with the Clinton policies, assumes a fairly weak expansion during the 1994 to 1999 period. Present policies are not sufficient to move the industrial countries rapidly ahead, so that some concerted action is needed. (See the Concerted Action Scenario below.)

- In the developing world, growth averages about 5 percent per year, with Asia including China growing even one and half percentage points faster. The formerly planned economies (other than China) show modest growth, at two and a half percent, that represents a recovery from recent experience. The model sees these countries returning to their former growth path.
- For world trade this forecast projects growth in dollar terms of between 8 and 9 percent annually, with international prices rising 2 and a half to 3 percent.

All of the policy scenarios reported below are run with this Baseline Forecast as their basis. As We have noted above, this Baseline incorporates U.S. policy changes recently proposed by the Clinton administration. To give an indication of the impact of the Clinton policies themselves, Table 2 reports the differences between our baseline and a "pre-Clinton" forecast that excludes these policies. The effects of these moderate Clinton policies are:

For the United States:

- The short-term stimulus package raises US GNP 0.3% in 1993, creating an additional 500,000 jobs.
- The spending cuts and tax increases reduce the federal budget deficit by more than \$100 billion by the decade's end. The contractionary effect of these policies takes about a half a percent off GNP growth in each of the years 1995 to 1997, although there is some rebound afterward due to falling interest rates.
- The weaker economy mid-decade leads to modestly smaller current account deficits, although the current account deficit is only \$3 billion smaller by 1999.

For Japan :

- The relatively modest Clinton fiscal package has a very small effect on Japan's economy, with stronger export growth leading to 0.1% higher GNP mid-decade.
- The contractionary budget balancing policies lead to a slight export-led growth decline for Japan later in the decade.

For the World :

- Effects on the overall world economy are dominated by contraction in the US. World GNP is about a half percent lower than in the "pre-Clinton" baseline by 1997.

Some experiments with alternative policy scenarios for the United States have also been computed. Specifically in Table 3 we show the results of an *Activist Counter-cyclical Expenditure Policy* that has been proposed for the Clinton Administration. This policy scenario assumes an increase in 1993 and 1994 in US nondefense government spending-public investments and other types of "pump priming"-building up to \$50 billion in 1994.

As anticipated, this policy has significant short run stimulus impacts, But the problems with such a policy are apparent:

For the United States:

- The increase in GNP of approximately 1 percent in 1993 and 1994 is fully offset in subsequent years by a decline. In other words the policy leads to greater cyclical amplitude without a long run increase in economic activity. Indeed, the second half of the 1990s is a period of slightly negative growth.
- The deficit deteriorates by almost \$20 billion for an extended period even beyond 1995.
- The stimulus policy has significant inflationary impact and causes increases in interest rates, which explains the persistence of the negative effects after the stimulus has been eliminated in 1995.
- The trade impacts attributable to the cyclical stimulus are quite small, though negative on balance.

For Japan :

- The US stimulus shows an initial small positive impact, but with the slower expansion of the US later in the decade, Japan is also affected negatively at that time.

For the World Economy:

- The effects of the US stimulus are quite small, 0.1 to 0.2%. The US economy is not powerful enough at this time to act as a locomotive for the rest of the world.

An alternative simulation was also run with respect to balancing the budget in a relatively short period. This alternative has now become unlikely and so these calculations are not presented here. Balancing the budget by 1996, a major effort, would yield considerably less favorable outcome from the perspective of production and employment with little gain in inflation or interest rates. The economy would be back near growth recession levels, with growth between 0 and 1.0 percent per year in 1996. However, such scenarios do yield some improvement in the trade balance, since U.S. imports are sensitive to economic activity. Moreover, interest rates would be yet a little lower, setting the stage for a recover later in the decade.

3. Trade Balance Improvement Scenarios

A variety of possibilities exist for improvement of the Japanese trade balance, reducing the large disequilibrium of Japanese trade particularly with respect to the United States. It is not clear, however, by what means the trade balance improvement should be introduced and how substantial an improvement is achievable. The possibilities that could be considered are:

1. Macropolicy changes designed to accelerate growth in Japan and to slow growth in the United States. (This option seems rather limited in view of political constraints.)
2. Exchange rate changes. (A realignment of the yen exchange rate is included in several of the simulations that follow.)
3. Voluntary export restraint agreements. (Simulations of VERs have been considered in an earlier paper (Adams, Gangnes, and Shishido, June, 1992).
4. Protectionism in the US and in Europe.
5. Import incentives in Japan.

Some combinations of policies, for example an economic stimulus package with a revaluation of the yen and specific import incentives, are possible prospects. Our primary attention in the *Import Stimulus Scenario* will focus on an expansion of Japanese imports as a result of government policy favoring imports. Such policies can take the form of publicity campaigns but could also take the form of import incentives to consumers, investors, and public agencies. In an alternative simulation below we have combined direct import stimulus with other expansionary macro policies.

3.1. Import Stimulus Policy

The assumptions of our import stimulus policy scenario are as follows. On the industry level, we have assumed explicit increases in Japanese imports in the aggregate, from the United States, and by particular industries:

- The aggregate import increases amount to approximately current \$50 billion with about \$20 billion of that from the United States. (See appendix Tables A and B.)
- These increases have been allocated across industries as shown in appendix Tables A and B.

The results of this simulation on the macro and for trade are shown in Tables 4 A to D. The principal salient points are the following:

For the United States:

- An improvement in GNP of almost 1 percent during the mid 1990s.
- This produces approximately a one half percent decline in the unemployment rate.
- An improvement of the US trade and current account balances of some \$25 billion (current).

For Japan:

- The impact on the Japanese economy is substantially negative producing an almost 5 percent reduction in real GNE.
- However, the impact on unemployment is quite small reflecting the insensitivity of employment to economic activity in Japan.
- There is substantial reduction in the personal consumption deflator, 1.5 to 2 percent in the mid 1990s.

For the World:

- There is little impact on world economic activity amounting to only 0.1 to 0.2 percent of GDP.
- World trade is, however, a little over 1 percent higher.

On the industrial level (Table 4 D), the effects are noticeable particularly in the industries affected directly, though indirect effects are also apparent. The principal results are:

For the United States:

- Significant increases in economic activity in a wide of range industries. Impacts are particularly apparent in Automobiles, Aircraft, and Electrical Machinery.

For Japan:

- Industrial impacts are largely negative and particularly negative for those industries gaining in the United States.

3.2. Mixed Import Stimulus Scenario

In view of the sharply negative impacts of import expansion on the Japanese economy, it seems appropriate to introduce another simulation that would include offsetting policies in Japan. This scenario, the *Mixed Import Stimulus scenario*, adds stimulative macro policies to the Import Stimulus Scenario considered above. The added stimulus to the Japanese model is as follows:

1. a ten percent revaluation of the Japanese yen with respect to the United States dollars,
2. a cyclical expenditure stimulus package in Japan of 7000 billion (1980) yen, and
3. a 1 percentage point reduction in the Japanese discount rate.

The results of this calculation are summarized in Tables 5 A to D. The principal results of this calculation are as follows:

For the United States:

- The impact is similar to that obtained in the Japan Import scenario, a temporary increase in GNP of up to one percent.
- The improvement of the US trade balance with respect to Japan rises to some \$40 billion.
- While the measures described are substantial in magnitude and have appropriate effects, the Japanese trade balance with respect to the United States is still not quite brought into balance.
- Certain industries are however significantly affected, particularly automobiles, aircraft and machinery.

For Japan:

- The policy stimulus of this solution substantially returns the level of Japan's real output to the base solution level, offsetting the negative impact of the import expansion.
- The trade balance is considerably affected, as anticipated, though a substantial surplus remains.
- Industrial impacts are very important since automobiles, machinery and other industries that direct a large part of their product to fields where there is competition from US suppliers are negatively affected, while there is some offset by industries that gain from the Japanese policy stimulus.

To summarize, increases in Japanese imports are clearly a way to redress the Japanese trade balance. But the problem is that such stimulus to imports is likely to have damaging impacts on Japanese industries, particularly those that produce import-competing products. For this reason offsetting import increases with fiscal or monetary policy is necessary. Even so, uneven industrial impacts and changed composition of industry output may call for substantial readjustments.

4. International Concerted Action Scenario

As we have noted above, the poor performance of many of the world's industrial economies suggests the need for a *Concerted Action Scenario* that assumes a joint systematic effort on the part of the G-7 countries to improve the global economy. This scenario, like the other alternative scenarios, begins with the same assumption as the baseline. The only changes introduced are those necessary to characterize the policy alternatives. This means that a comparison between the alternative and the baseline simulation measures the policy impact. The tables (Tables 6A to D) show differences between the alternatives and the baseline simulation.

International concerted action is here intended to mean systematic efforts by the G-7 countries to employ macroeconomic policy-particularly fiscal, monetary and exchange rate policy-to improve the joint outcome for all the members of the group. The policy exercise is focused on the 1993-1996 period, though policy changes during this time may be extended and will surely affect the outcome later in the decade. On the basis of widespread discussion of the policy measures necessary to advance the industrial economies, we have assumed that a reasonable concerted action scenario would contain the following principal elements:

- Significant additional increases in government spending on investment in the United States, Japan and Europe. The spending increase for the United States is \$30 billion. For Japan, we have assumed an additional 3500 billion (1980) yen increase in government investment.
- Significant reduction in interest rates in Europe, particularly in Germany. A 3 percentage point reduction in interest rates has been assumed. That leaves interest rates in Europe at the 4 to 5 percent level, still above those prevailing in the United States and Japan.
- As a result of lower interest rates in Europe, we have allowed for a further one percentage point reduction in interest rates in the United States, and an additional one percentage point decline in the Japanese discount rate.
- With respect to exchange rates, the simulation assumes a 10 percent appreciation of the Japanese yen with respect to the US dollar and European currencies. No adjustment have been made for European currencies with respect to the US dollar.

The results of international concerted action are summarized in Table 6 A. The principal conclusions with respect to macroeconomic performance are as follows:

For the United States:

- There is substantial improvement in US GNP, amounting to 3 percent over much of the forecast period.
- Unemployment is reduced by 2 to 2.4 percentage points.

- The stimulus has some adverse effect on inflation, adding an additional one percent to the annual inflation rate.
- While US exports increase by up to 4 percent at the end of the decade, imports rise still more rapidly reflecting the high sensitivity of US imports to economic activity. The result is a substantial increase (\$100 billion) in the US nominal trade balance deficit by 1999. Most of this impact is not, however, with Japan.

For Japan:

- The Japanese economy shows an improvement in real GNE of 2 to 4 percent, a little smaller at the start than in the US.
- Interestingly, the improvement in economic activity combined with slower inflation, reflecting the upward valuation of the yen.
- Japanese exports show significant increase and so do Japanese imports. But the Japanese trade balance remains only moderately affected.

For the rest of the world:

- Effects on the world economy are also favorable and substantial, amounting eventually to 1.5 percent of world GDP. The effects are greater on the industrial countries than on the developing countries.
- World trade is increased gradually by approximately 3 percent.

The industrial effects of this scenario (Table 6 D) are:

In the United States:

- As anticipated, the impacts on industry are broadly based. The greatest gains are to the automobile, aircraft, and machinery industries and to their suppliers like rubber and steel. These industries show substantial expansion, up to 10 percent.
- Employment effects are more moderate, but again in these relatively high-paying industries.

For Japan:

- Positive industrial effects are somewhat less pronounced than for the United States and scattered over a wider range of industries. Here too metals related industries show the greatest gains.
- Employment effects in Japan are uniformly much smaller than in the United States.

Our experiments with international concerted action scenarios show that there is potential for improving outcomes on an internationally cooperative basis, but the potentials of such policies should not be exaggerated because 1) such cooperation is difficult to implement, and 2) the results are quite modest.

5. Overseas Development Assistance (ODA) Scenario

The large Japanese trade surplus suggests the possibility that Japan might provide substantial assistance to countries that are short of capital, particularly the low income developing countries. Our interest is to see the impact of Overseas Development Assistance on the Japanese economy and on the other industrial countries. Because of the inadequacy of some of the models for the recipient countries in our version of the NIRA-LINK system, it is not possible to evaluate clearly the impact on the recipient countries, so that we have made assumptions about their growth as a result of foreign assistance.

The basic assumptions of the *ODA Simulation* are:

- An allocation of \$25 billion in real terms (1992 prices) of additional ODA payments by Japan over the entire forecast period. In nominal terms the allocation grows moderately over the period.

- Increase in investment by one percent of GDP in each of the recipient countries: India, Philippines, Thailand, Indonesia, Malaysia and the former Soviet Union. (Technical difficulties precluded simulation of assistance to China and the non-Soviet Eastern European countries.) This increase appears to correspond approximately to the capital contribution made under the new ODA policy. Its impact on the growth of GDP in the countries is endogenously determined by the respective models.

The effects of the ODA scenario (Tables 7 A to D) can be summarized as follows:

For the United States:

- The effects on economic activity are very small, not surprisingly since they would be by way of third parties who are generally not primary trading partners with the US.
- The gain in US exports amounts to only \$1 billion.

For Japan:

- The macroeconomic impact is, like for the United States, very small.
- There is somewhat surprisingly only little effect on Japanese exports.
- There is an improvement of the Japanese current account of some \$25 billion that has been programmed in as the ODA contribution.

For the world economy:

- The increase in nominal imports of the world economies amounts to approximately one half of the increase in Japanese ODA.
- Moreover, the developing economies, which benefit from the overseas assistance, increase imports by only one quarter of the ODA allocation.
- The shortfall between aid and imports noted above could, of course, represent a substitution of ODA for borrowing that would have otherwise supported imports of the ODA beneficiary countries.

There remain some serious questions on how the model handles an ODA contribution. The difficulties involve first the determination of imports in the recipient countries. These presumably should have increase by substantially the full amount of the ODA receipts. There is secondly a question of how the ODA was allocated between consumption and capital goods, determining its impact on growth. Finally there is a serious question of whether the trade matrixes in LINK properly describe the geographic sourcing of the imports purchased with development aid. At the very minimum, even if the aid is allocated without geographic source restrictions, the current trade matrix probably does not provide a very accurate picture of the geographic allocation of imports bought by developing countries through development assistance.

6. Conclusions

This memorandum has summarized numerous simulations with the NIRA-LINK model system. This integrated disaggregated world model system, with special emphasis on Japan and the United States, has made possible an evaluation of a number of currently relevant alternative policy scenarios.

A baseline scenario analysis has included policies recently proposed by the Clinton Administration in the United States. This scenario, which records the recent swing toward recovery in the United States, suggests that Clinton Administration policies will be moderately successful at maintaining growth and at achieving a partial improvement in the budget deficit. Our analysis suggested that an activist counter cyclical policy at this time would have temporary positive results, but would leaving the US economy in a somewhat more adverse cyclical position later in the decade.

We have imposed on the *baseline solution* a variety of alternatives. We summarize these simulations briefly here.

- Increased Japanese imports. The assumption of significantly increased Japanese imports has only moderate impact on the United States economy, However, it has substantially adverse impacts on the Japanese economy. Only with additional offsetting public spending and monetary easing can such an increase in imports be accommodated with continued high level of activity in Japanese industry.
- The concerted action scenario. Combined stimulus policies on the part of the G-7 have considerable promise to improve world economic activity. The United States, Japan, the other industrial countries, and to a somewhat lesser extent the developing countries, benefit significantly from concerted policy efforts. These possibilities deserve further study.
- The ODA scenario. Simulating the effects of additional Japanese ODA assistance poses some problems in the context of the NIRA LINK system. While there is impact on the developing economies and on the Japanese current account balance, it is not clear that the full impacts of trade are being captured.

The NIRA-LINK model system has provided a tool for detailed world wide policy analysis. We are grateful to the original authors of the models, to Project LINK, and to NIRA for supporting this modeling effort.

Table 1A: U.S., Japan, World Macro Summary / MAXICLN5: MODERATE CLINTON BASELINE (3/6)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	wdif								
UNITED STATES:																			
GNP (72\$ billion)	1909.6	1.7	1889.7	-1.0	1911.5	1.2	1970.3	3.1	2027.7	2.9	2137.2	2.5	2168.4	1.5	2230.5	2.9	2330.5	4.5	
Nominal GNP (\$b)	5492.8	7.1	5645.9	2.8	5861.4	3.8	6224.1	6.2	6585.7	5.8	7036.5	7.7	7428.6	6.6	7878.3	7.6	8320.7	8.8	
CEI Employment (mil)	401.3	5.0	414.1	3.2	424.0	2.4	438.4	3.4	452.8	3.3	476.1	5.1	500.7	4.9	550.1	7.7	574.7	4.5	
Unemployment Rate (%)	18.4	8.9	117.6	5.9	116.9	-0.4	117.6	0.6	118.8	1.0	120.0	1.0	121.6	1.3	122.2	0.7	123.3	0.9	
3-Mo CD Rate (%)	8.1	-10.8	5.9	-37.9	3.7	-36.8	7.7	-25.5	6.7	57.7	4.9	11.2	4.4	-11.4	4.3	0.9	4.3	-0.5	
Fed Surplus (\$b)	-220.8	43.9	-268.2	21.5	-290.0	8.1	-257.5	-21.2	-213.0	-17.3	-156.3	-26.6	-118.3	-24.3	-93.7	-83.2	-45.3	-51.7	
Current Acct (\$b)	-84.4	-15.1	-2.3	-97.3	-55.5	*****	-43.1	-22.3	-38.8	-10.0	-38.8	-29.1	-23.5	-5.5	-43.2	83.9	-35.9	-16.9	
W.A. \$ Exch Rate	97.2	1.2	98.3	1.2	98.9	0.6	98.7	-0.3	98.8	0.1	99.0	0.2	99.2	0.2	100.0	0.6	99.4	-0.7	
Pers Cons Exp	1251.8	2.0	1249.6	-0.2	1260.8	0.9	1290.8	2.5	1313.2	2.5	1345.9	2.5	1390.7	2.5	1443.1	2.5	1493.2	3.5	
Bus Fixed Invest	260.7	1.9	248.8	-4.5	258.1	3.7	258.1	0.0	278.8	-0.4	308.7	10.4	359.7	16.2	388.3	7.9	427.1	7.4	
Residential Invt	68.8	-0.4	58.4	-15.1	64.3	10.2	76.1	18.3	78.8	0.4	80.5	3.0	80.5	0.2	76.5	2.4	82.4	20.8	
Ch Bus Invent	1.5	-89.1	7.4	401.2	5.2	-29.2	11.0	110.5	13.9	26.5	18.4	32.4	18.7	21.0	17.5	9.1	23.9	35.6	
Net Export GDS	-18.0	-22.2	-23.5	30.7	-24.2	3.1	-24.8	2.4	-25.3	2.0	-26.5	4.7	-29.3	10.7	-34.8	18.6	-43.2	24.2	
Exports	183.5	5.3	184.9	0.8	194.7	5.3	204.6	5.1	214.6	4.9	223.7	4.2	231.4	3.4	238.6	3.1	243.6	2.1	
Imports	344.9	2.8	349.0	1.2	349.3	-0.9	329.4	4.8	329.9	4.6	350.2	4.3	340.7	0.7	348.2	2.1	351.9	0.8	
Govt Purch GDS	344.9	2.8	349.0	1.2	349.3	-0.9	329.4	4.8	329.9	4.6	350.2	4.3	340.7	0.7	348.2	2.1	351.9	0.8	
JAPAN:																			
GNP (80Y billion)	35995.2	6.0	37465.6	4.1	38039.6	1.5	39185.9	3.0	40525.4	3.4	41738.3	3.0	43139.7	3.4	44894.0	3.9	46228.9	3.9	49761.0
GNP (197\$ billion)	42137.1	2.0	45624.1	9.4	46498.2	1.8	47340.7	1.8	49293.7	4.1	52112.3	5.7	54618.3	4.8	57074.0	4.1	59357.1	4.8	63084.2
Pers Cons Exp	17813.6	5.2	18217.7	4.9	18555.8	4.9	19006.6	0.6	19468.2	1.7	20000.0	2.0	20334.5	2.0	20794.1	2.1	21242.8	2.0	21891.2
Cons-Nonprofit	2686.1	4.9	2817.7	4.9	2955.8	4.9	3100.6	4.9	3252.5	4.9	3411.9	4.9	3579.1	4.9	3754.5	4.9	3938.4	4.9	4131.4
Cons-Government	30478.6	-0.3	31422.9	3.1	32395.6	3.1	33397.5	3.1	34429.4	3.1	35492.3	3.1	36587.1	3.1	37714.7	3.1	38876.1	3.1	40072.4
Investment-Suen	2213.2	9.8	2772.7	4.5	31372.6	-1.7	84650.2	4.0	88176.1	4.2	91382.9	3.6	95442.9	4.4	100303.4	5.1	108114.2	7.8	119778.7
Inventory-Govt	26498.1	4.9	27852.5	4.9	29032.5	4.1	30195.7	3.4	31268.8	4.3	32402.6	14.1	33499.4	1.9	34741.0	4.6	35983.6	4.5	39401.3
Inventory-Privt	407.4	*****	-135.2	*****	246.4	*****	273.9	21.6	3182.7	46.4	3378.7	-10.8	4378.4	22.3	4314.7	-0.4	4399.1	0.4	6940.7
Inv-Government	305.9	0.0	305.9	0.0	305.9	0.0	305.9	0.0	305.9	0.0	305.9	0.0	305.9	0.0	305.9	0.0	305.9	0.0	
Net Exports	430.3	-5.8	1593.8	27.0	2661.9	67.0	5939.6	133.1	7528.2	26.7	8436.5	22.2	8436.5	22.2	13434.9	59.2	15395.4	14.6	21404.2
Exports	74634.3	10.5	74218.0	-0.6	75886.4	2.2	79961.5	4.5	84349.2	5.8	85957.1	1.9	90220.3	5.0	98206.4	4.7	102796.0	4.7	113489.4
Imports	74204.0	11.4	72634.2	-2.1	73224.5	0.8	74021.9	1.1	76821.1	3.8	79053.3	2.9	81783.8	3.5	84771.6	3.7	87400.6	3.1	91785.4
WORLD:																			
Real GNP	6688.4	2.8	6800.0	1.7	6979.1	2.6	7211.2	3.3	7431.6	3.1	7661.6	3.1	7891.3	3.0	8116.1	2.8	8387.1	3.3	8667.8
Net Exports	854.0	4.0	857.8	0.4	904.6	5.5	962.6	6.4	1015.5	5.5	1068.1	5.2	1124.6	5.3	1180.3	4.9	1218.1	3.2	1312.9
Noml Exports (\$b)	3375.4	8.5	3562.5	5.5	3882.2	9.0	4227.4	8.9	4588.4	8.5	4966.7	8.2	5354.6	7.8	5778.4	7.9	6145.5	6.4	6782.0

Notes: Figures in bold and annual growth rates in billions of 1980 yen (Japan), billions of 1972 dollars (US), and billions of 1970 dollars (world), unless indicated. ***** denotes % change over three digits.

Table 1B: World Exports, Imports and Trade Balances (f.o.b.) Project LINK - University of Pennsylvania /
 MAXICLN5: MODERATE CLINTON BASELINE (3/6)

	1990	%chg	1991	%chg	1992	%chg	1993	%chg	1994	%chg	1995	%chg	1996	%chg	1997	%chg	1998	%chg	1999	%chg
	*** Billions of U.S. \$ ***																			
United States	386.72	10.8	408.05	5.5	441.17	8.1	483.65	9.6	527.52	9.1	575.77	9.1	624.42	8.5	675.84	8.2	715.11	5.8	806.43	12.8
Exports	491.53	2.8	460.94	-2.2	580.10	10.2	548.96	9.2	608.69	9.9	695.96	14.5	748.42	7.6	814.05	9.1	875.65	7.5	986.67	10.3
Balance	-104.82		-72.79		-88.93		-65.20		-108.69		-119.99		-124.17		-141.03		-179.54		-180.24	
Japan	333.05	2.5	351.91	5.7	373.15	6.0	404.16	8.3	440.91	9.1	480.38	9.0	520.22	8.3	567.71	9.1	573.85	1.1	661.48	15.3
Exports	207.82	11.5	224.52	8.0	241.61	7.7	255.99	5.9	277.52	8.4	297.68	7.3	318.38	7.0	340.35	6.9	362.85	6.6	400.89	10.5
Balance	125.22		127.39		131.55		148.18		163.39		182.70		201.84		227.35		210.99		260.60	
Other Industr. Countries	1598.95	9.2	1792.69	5.5	1959.70	9.3	2134.85	8.9	2319.16	8.6	2511.52	8.3	2708.96	7.8	2932.44	8.2	3133.78	6.9	3448.59	10.0
Exports	1736.99	10.6	1847.16	6.4	2013.93	9.0	2201.09	9.3	2393.08	8.7	2594.72	8.4	2803.07	8.0	3033.96	8.2	3257.00	7.4	3648.59	10.0
Imports	-36.44		-54.46		-53.23		-66.24		-73.91		-83.20		-94.11		-101.52		-123.21		-147.98	
Canada	123.89	9.0	120.40	-2.8	135.56	12.6	148.81	9.8	164.26	10.4	180.04	9.6	194.77	8.2	212.84	9.3	231.89	9.0	254.55	9.8
Exports	119.28	10.7	115.35	-3.3	129.54	12.3	146.10	12.8	162.43	11.2	180.46	11.1	198.42	9.8	212.54	7.2	233.96	10.1	272.45	16.5
Balance	4.61		5.05		6.02		2.72		1.83		-0.42		-3.66		0.29		-2.07		-17.90	
Austral. N.Z.	47.50	-0.1	53.17	11.9	58.82	10.6	62.81	6.8	67.60	7.6	72.16	6.7	77.01	6.7	82.13	6.6	85.98	4.7	93.97	9.3
Exports	52.81	10.4	58.29	10.4	61.94	6.3	65.37	5.5	69.77	6.7	74.71	7.1	79.32	6.2	84.74	6.8	90.65	7.0	96.10	6.0
Balance	-5.31		-5.12		-3.11		-2.56		-2.17		-2.56		-2.31		-2.60		-4.66		-2.13	
EC	1251.43	9.9	1338.38	6.1	1454.73	9.5	1584.12	8.9	1719.34	8.5	1861.01	8.3	2007.63	7.9	2172.84	8.2	2318.81	6.7	2555.29	10.2
Exports	1282.98	11.1	1376.40	7.3	1504.48	9.3	1652.65	9.8	1799.34	8.9	1951.30	8.4	2109.39	8.1	2289.01	8.5	2450.10	7.0	2702.60	10.4
Balance	-31.54		-48.02		-49.80		-68.53		-80.42		-90.29		-101.67		-116.17		-131.29		-148.74	
Developing Countries	705.97	9.2	742.28	5.1	820.41	10.5	883.44	7.7	952.47	7.9	1021.49	7.2	1091.30	6.8	1170.65	7.3	1252.17	7.0	1349.56	7.8
Exports	665.50	8.5	721.50	8.4	792.27	9.8	847.73	7.0	909.82	7.3	974.80	7.3	1038.53	7.4	1100.49	7.8	1192.52	8.2	1254.38	10.4
Imports	40.47		20.97		28.14		35.71		42.65		44.80		48.67		40.46		48.64		95.17	
Asia	392.62	10.0	421.01	7.2	473.32	12.4	501.99	6.1	534.80	6.5	568.49	6.3	602.36	6.0	642.14	6.6	681.41	6.1	717.53	5.3
Exports	384.23	9.1	422.06	9.8	470.78	11.5	502.36	6.7	538.74	7.2	578.08	7.3	620.20	7.3	668.70	7.8	711.63	5.3	766.88	7.4
Balance	8.40		-1.05		2.53		-0.37		-3.94		-9.59		-17.85		-26.57		-47.86		-53.00	
Western Hemisphere	109.44	6.8	112.28	2.6	124.38	10.8	137.59	10.6	151.84	10.4	166.15	9.4	180.71	8.8	196.34	8.6	213.92	9.0	235.88	10.3
Exports	109.96	10.0	113.64	4.2	123.22	10.2	137.38	8.9	152.74	9.2	166.01	8.4	180.47	9.0	197.51	8.6	216.26	8.5	237.89	9.9
Imports	19.55		18.64		21.15		25.21		29.20		33.14		35.73		38.83		42.98		47.99	
C.P.E. excl China	250.83	6.7	267.53	6.7	291.78	7.6	321.27	11.6	348.40	8.4	377.60	8.4	409.74	8.5	431.83	5.4	470.68	9.0	516.07	9.6
Exports	246.97	8.4	268.42	8.7	292.29	8.5	329.20	13.0	356.88	8.4	386.26	8.2	419.67	8.7	440.02	4.8	472.80	7.4	513.44	8.6
Imports	3.85		-0.89		-3.51		-7.93		-8.49		-15.26		-19.93		-18.20		-2.12		-2.63	
Stat. Discrep.	-28.20		-20.75		-14.10		-14.22		-14.54		-15.91		-16.79		-16.48		-26.09		-32.01	
World Exports	3375.40	8.5	3562.45	5.5	3882.21	9.0	4227.37	8.9	4588.43	8.5	4966.71	8.2	5354.45	7.8	5778.36	7.9	6145.47	6.4	6782.01	10.4
World Imports	3195.43	4.3	3415.51	4.15	3729.33	3.3	4039.23	2.3	4352.29	2.9	4652.29	4.65	4962.29	4.76	5246.29	4.9	5504.30	5.04	5912.17	12.4
World Exports Real	853.96	4.0	857.80	0.4	904.61	5.5	962.57	6.4	1015.54	5.5	1068.11	5.2	1124.61	5.3	1180.26	4.9	1218.14	3.2	1312.91	7.8

Table 1C: World Gross National Product (1970 U.S. \$) Project Link - University of Pennsylvania
/ MAXICLN5: MODERATE CLINTON BASELINE (3/6)

	1990	1991	1992	1993	1994	1995	Mean
U.S.	1.7	-1.0	1.2	3.1	2.9	2.8	1.8
Japan	6.0	4.1	1.5	3.0	3.4	3.0	3.5
Other Indust. Countries	2.1	1.4	2.5	2.9	2.5	2.4	2.3
Canada	1.3	1.3	6.7	5.2	4.5	4.3	3.9
Australia, N.Z.	2.9	3.0	3.3	1.3	1.7	1.7	2.3
EC	2.1	1.3	2.1	2.7	2.2	2.0	2.1
Rest of Industrialized	2.0	1.5	2.0	2.7	3.1	3.4	2.4
Developing Countries	5.4	4.5	5.5	5.5	4.7	5.4	5.2
OPEC	3.5	2.4	3.9	2.8	3.5	3.0	3.2
Africa	3.7	2.7	3.1	2.8	2.6	2.8	2.9
Asia incl China	7.2	6.5	6.8	6.8	5.7	6.9	6.6
Middle East non-oil	4.2	3.2	3.4	4.4	3.4	1.8	3.4
Western Hemisphere	2.9	1.5	4.1	4.4	3.6	3.9	3.4
C.P.E. excl China	2.3	2.4	2.4	2.3	2.4	2.4	2.4
World total	3.0	2.5	3.3	3.4	3.1	3.2	3.1

	1996	1997	1998	1999	Mean
U.S.	2.5	1.5	2.9	4.5	2.8
Japan	3.4	4.1	3.9	6.7	4.5
Other Indust. Countries	2.3	2.5	1.9	2.5	2.3
Canada	3.7	4.2	3.0	2.6	3.4
Australia, N.Z.	2.0	2.0	1.6	2.6	2.0
EC	2.0	2.1	1.4	2.3	1.9
Rest of Industrialized	3.4	3.7	3.8	4.1	3.7
Developing Countries	5.1	5.2	7.0	3.3	5.1
OPEC	3.2	3.0	3.6	4.0	3.5
Africa	2.7	2.6	2.2	3.2	2.7
Asia incl China	6.2	6.3	9.0	2.5	6.0
Middle East non-oil	3.0	2.9	3.7	4.2	3.5
Western Hemisphere	3.6	4.1	4.6	5.1	4.3
C.P.E. excl China	2.6	2.3	2.2	2.1	2.3
World total	3.2	3.2	3.5	2.7	3.1

Table 1D: U.S., Japan Industry Detail, Selected Industries / MAXICLNS: MODERATE CLINTON BASELINE (3/6)

	1990		1991		1992		1993		1994		1995		1996		1997		1998		1999	
	val	%Δ	val	%Δ	val	%Δ	val	%Δ	val	%Δ	val	%Δ	val	%Δ	val	%Δ	val	%Δ	val	%Δ
Auto Parts	4150.7	-5.1	3869.9	-6.8	3926.2	-1.4	4050.9	3.2	4408.0	8.6	4850.5	10.1	5808.3	19.5	5904.1	1.7	6122.7	3.8	6621.9	8.3
Textiles	42226.7	1.4	38974.8	-7.7	39522.0	1.4	39522.0	0.0	4050.9	2.5	4408.0	11.1	4850.5	10.1	5808.3	19.5	5904.1	1.7	6122.7	3.8
Rubber, Plastic	33592.0	1.7	35076.3	-1.4	35543.5	1.4	35543.5	0.0	36813.9	3.7	39842.9	8.2	41971.1	5.3	44071.8	5.0	45012.4	2.3	46740.3	3.9
Iron & Steel	27437.5	-3.5	22594.9	-17.8	21544.5	-4.5	21544.5	-2.7	24661.1	14.6	25987.5	5.4	27520.7	5.9	28280.0	2.6	29100.9	3.0	30229.8	3.8
Rubber, Metal In	69879.6	1.1	65213.8	-6.6	66659.4	2.2	66659.4	0.0	70458.8	6.8	77189.1	9.5	82913.2	7.1	88401.1	6.6	94259.8	6.6	99529.8	5.5
Rubber, Metal In	109225.4	1.1	102221.1	-6.4	102221.1	0.0	102221.1	0.0	108510.9	6.2	117799.1	8.6	126200.9	7.2	134725.8	6.7	143400.9	6.6	152150.8	6.2
Elect Machin	108200.8	4.0	94658.6	-12.5	92329.9	-2.4	92329.9	-2.5	95815.7	3.8	101999.1	6.3	108510.9	6.4	117799.1	8.6	126200.9	7.2	134725.8	6.6
Aircraft	22527.8	-4.8	20483.0	-9.1	20153.1	-1.6	20153.1	-1.6	2102.9	1.9	53944.5	2.9	55911.9	3.6	58511.9	4.7	61521.9	5.2	64521.9	4.9
Aluminum	50885.7	0.9	51105.7	0.8	478249.7	1.1	49148.2	2.8	50668.6	3.1	52139.5	2.9	53783.2	2.8	54824.4	2.2	55911.9	2.0	56824.4	1.7
Utl'l, Elec	474858.6	1.9	470739.7	-0.8	478249.7	1.6	49148.2	4.9	50668.6	3.1	52139.5	2.9	53783.2	2.8	54824.4	2.2	55911.9	2.0	56824.4	1.7
Wholesale, Retail	1164853.0	1.3	1119659.0	-3.9	1128776.0	0.8	1183650.0	4.9	1231986.0	4.1	1276860.0	3.6	1314160.0	2.9	1341460.0	2.1	1379230.0	2.5	141165.0	2.0
Dur. Elec & El	2148.6	1.0	2178.3	1.4	2178.3	0.0	2178.3	0.0	2178.3	0.0	2178.3	0.0	2178.3	0.0	2178.3	0.0	2178.3	0.0	2178.3	0.0
Dur. Mach excl G	2490.4	1.4	2476.4	-0.6	2377.4	-4.0	2399.3	0.9	2424.6	1.0	2452.6	1.1	2481.0	1.1	2507.6	1.1	2532.6	1.0	2557.6	1.0
Dur. Motor Vehic	8344.6	3.1	8665.3	3.8	798.4	-7.9	1407.5	-5.7	1407.0	0.0	1438.2	2.2	1457.6	1.4	1471.0	0.9	1483.2	0.8	1494.8	0.8
Dur. Equip	1485.8	1.4	1493.2	0.8	1407.5	-5.7	1407.0	0.0	1438.2	2.2	1457.6	1.4	1471.0	0.9	1483.2	0.8	1494.8	0.8	1494.8	0.0
Dur. Pad Metal	1850.7	5.1	1284.4	-2.8	1338.7	4.3	1338.7	0.0	1338.7	0.0	1338.7	0.0	1338.7	0.0	1338.7	0.0	1338.7	0.0	1338.7	0.0
Nondur Rubber	3037.8	-1.9	3079.9	1.4	3012.5	-2.3	2872.6	-4.3	2872.6	-4.3	2872.6	-4.3	2872.6	-4.3	2872.6	-4.3	2872.6	-4.3	2872.6	-4.3
Transp	241811.4	1.2	25004.8	1.4	25445.0	1.8	25727.6	1.1	2625.4	1.7	2682.4	2.1	2748.2	2.4	2814.3	2.4	2880.4	2.4	2946.5	2.3
Service	25207.9	1.8	25296.3	0.4	25426.3	0.5	25732.9	1.2	26533.9	4.3	27482.4	3.4	28433.9	3.6	29384.2	3.3	30335.2	3.4	31286.5	3.3
Wholesale & Retail	87819.6	0.9	88923.7	1.3	88746.9	-0.2	89382.1	0.7	90483.1	1.2	91644.6	1.3	92828.2	1.3	94013.2	1.2	95198.9	1.3	96384.1	1.3
All Priv Sec																				
Rubber Products	2338.1	9.6	2145.7	-8.2	2226.6	3.8	2445.3	9.8	2664.0	9.0	2882.7	8.2	3101.4	7.6	3320.1	7.1	3538.8	6.6	3757.5	6.1
Petroleum Prods	15129.1	8.2	14718.2	-2.7	15719.8	6.8	15910.2	1.2	16683.0	4.8	17456.0	5.0	18229.0	4.5	19002.0	4.3	19775.0	4.1	20548.0	4.4
Roll, Cast, Forge	19589.3	7.1	17822.0	-9.2	17943.2	0.7	18160.5	1.2	19310.9	6.3	20561.0	6.4	21811.0	6.1	23061.0	5.7	24311.0	5.4	25561.0	5.3
MCh Nonferrous	14667.9	1.9	16007.9	10.7	16445.3	2.3	16533.9	0.5	16622.4	0.5	16710.9	0.5	16799.4	0.5	16887.9	0.5	16976.4	0.5	17064.9	0.5
MCh Ferrous	13467.9	1.9	13407.7	-0.4	13413.3	0.0	13421.9	0.0	13430.5	0.0	13439.1	0.0	13447.7	0.0	13456.3	0.0	13464.9	0.0	13473.4	0.0
Machinery	31389.1	13.9	32431.7	3.3	32813.3	1.5	32882.9	0.2	32952.4	0.2	33021.9	0.2	33091.4	0.2	33160.9	0.2	33230.4	0.2	33300.0	0.2
Electric Machinery	40159.4	15.5	44791.1	11.5	47660.3	6.4	51292.9	7.3	54925.4	7.1	58559.9	6.5	62193.4	6.1	65787.9	5.8	69382.4	5.4	72976.9	5.2
Automobiles	22996.8	7.4	23557.6	2.4	23528.1	-2.2	24208.2	2.9	24888.3	2.8	25568.4	2.7	26248.5	2.7	26928.6	2.6	27608.7	2.5	28288.8	2.4
Autotrucks	22769.9	7.5	23528.8	3.4	23528.8	0.0	24208.2	2.9	24888.3	2.8	25568.4	2.7	26248.5	2.6	26928.6	2.6	27608.7	2.5	28288.8	2.4
Industrial Construct	21177.6	13.0	14307.4	6.2	15017.3	5.0	15335.9	2.1	15654.5	2.1	15973.1	2.0	16291.7	1.9	16610.3	1.9	16928.9	1.8	17247.5	1.8
Electric Power	12401.7	7.9	12479.2	0.6	12698.1	1.8	12917.6	1.7	13137.1	1.7	13356.6	1.7	13576.1	1.6	13795.6	1.6	14015.1	1.5	14234.6	1.5
Machinery, Equip	21401.7	7.9	21479.2	0.4	21735.0	1.5	22060.3	1.5	22385.6	1.5	22710.9	1.5	23036.2	1.4	23361.5	1.4	23686.8	1.4	24012.1	1.4
Finance & Insur	691388.1	7.0	769385.4	11.3	727350.2	-7.1	712330.2	-2.0	712330.2	-2.0	712330.2	-2.0	712330.2	-2.0	712330.2	-2.0	712330.2	-2.0	712330.2	-2.0
Natural Textile	73.3	5.2	73.4	0.2	72.2	-1.7	71.7	-0.7	71.8	0.0	71.9	0.0	72.0	0.1	72.1	0.1	72.2	0.1	72.3	0.1
Rubber Prods	158.0	2.7	158.9	0.6	158.2	-0.4	156.6	-1.0	155.9	0.0	155.2	-0.4	154.5	-0.4	153.8	-0.4	153.1	-0.5	152.4	-0.5
Cement	129.6	5.4	129.4	-0.4	128.7	-2.4	127.7	-0.7	126.8	-0.7	125.9	-0.7	125.0	-0.7	124.1	-0.7	123.2	-0.7	122.3	-0.7
Metall Equip Met	1090.4	1.6	1046.2	-4.9	1160.5	11.4	1260.7	8.6	1360.9	7.9	1461.1	7.4	1561.3	6.9	1661.5	6.4	1761.7	5.9	1861.9	5.4
Machinery	1334.4	4.8	1283.7	-3.7	1364.2	6.3	1464.4	7.3	1564.6	6.9	1664.8	6.4	1765.0	6.0	1865.2	5.6	1965.4	5.2	2065.6	4.8
Elect Machinery	2019.5	5.8	2133.3	5.6	2164.2	1.4	2154.1	-0.5	2144.0	-0.4	2133.9	-0.5	2123.8	-0.5	2113.7	-0.5	2103.6	-0.5	2093.5	-0.5
Motor Vehicls	880.6	2.3	897.8	2.0	900.9	0.3	898.1	-0.3	895.3	-0.3	892.5	-0.3	889.7	-0.3	886.9	-0.3	884.1	-0.3	881.3	-0.3
Hotel Vehicls	1091.0	0.9	1094.5	0.3	1074.1	-1.9	1057.0	-1.6	1039.9	-1.6	1022.8	-1.7	1005.7	-1.7	988.6	-1.8	971.5	-1.8	954.4	-1.9
Trucking & Buses	5793.4	1.9	5879.1	1.5	5934.5	0.9	5987.0	0.9	6039.5	0.9	6092.0	0.9	6144.5	0.9	6197.0	0.9	6249.5	0.9	6302.0	0.9
Household & Busnes	1091.0	0.9	1094.5	0.3	1074.1	-1.9	1057.0	-1.6	1039.9	-1.6	1022.8	-1.7	1005.7	-1.7	988.6	-1.8	971.5	-1.8	954.4	-1.9
Food & Beverages	5793.4	1.9	5879.1	1.5	5934.5	0.9	5987.0	0.9	6039.5	0.9	6092.0	0.9	6144.5	0.9	6197.0	0.9	6249.5	0.9	6302.0	0.9
Textiles	73.3	5.2	73.4	0.2	72.2	-1.7	71.7	-0.7	71.8	0.0	71.9	0.0	72.0	0.1	72.1	0.1	72.2	0.1	72.3	0.1
Rubber Prods	158.0	2.7	158.9	0.6	158.2	-0.4	156.6	-1.0	155.9	0.0	155.2	-0.4	154.5	-0.4	153.8	-0.4	153.1	-0.5	152.4	-0.5
Cement	129.6	5.4	129.4	-0.4	128.7	-2.4	127.7	-0.7	126.8	-0.7	125.9	-0.7	125.0	-0.7	124.1	-0.7	123.2	-0.7	122.3	-0.7
Metall Equip Met	1090.4	1.6	1046.2	-4.9	1160.5	11.4	1260.7	8.6	1360.9	7.9	1461.1	7.4	1561.3	6.9	1661.5	6.4	1761.7	5.9	1861.9	5.4
Machinery	1334.4	4.8	1283.7	-3.7	1364.2	6.3	1464.4	7.3	1564.6	6.9	1664.8	6.4	1765.0	6.0	1865.2	5.6	1965.4	5.2	2065.6	4.8
Elect Machinery	2019.5	5.8	2133.3	5.6	2164.2	1.4	2154.1	-0.5	2144.0	-0.4	2133.9	-0.5	2123.8	-0.5	2113.7	-0.5	2103.6	-0.5	2093.5	-0.5
Motor Vehicls	880.6	2.3	897.8	2.0	900.9	0.3	898.1	-0.3	895.3	-0.3	892.5	-0.3	889.7	-0.3	886.9	-0.3	884.1	-0.3	881.3	-0.3
Hotel Vehicls	1091.0	0.9	1094.5	0.3	1074.1	-1.9	1057.0	-1.6	1039.9	-1.6	1022									

Table 2: U.S., Japan, World Macro Summary / MAXICLINS: MODERATE CLINTON POL EFFECTS (3/18)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
UNITED STATES:																
GNP (72\$ billion)	-0.1	0.0	5.7	0.3	3.0	0.2	-7.0	-0.3	-16.1	-0.7	-28.6	-1.3	-18.7	-0.8	-12.4	-0.5
Nominal GNP (\$b)	0.0	0.0	32.0	0.5	42.6	0.1	49.5	0.9	25.9	2.3	-33.5	1.8	-8.6	1.2	-2.4	0.0
CPI	0.0	0.0	0.2	0.5	5.0	1.1	5.0	0.1	10.0	0.0	0.5	1.8	8.6	1.2	7.6	1.3
Employment (mil)	0.0	0.0	0.3	0.2	0.5	0.2	0.3	0.2	0.0	0.0	0.6	0.4	0.5	0.4	0.4	0.3
Unemploy Rate (%)	0.0	0.0	-0.2	-2.8	-0.3	-3.9	-0.1	-0.6	-0.1	3.4	0.6	10.1	0.6	9.6	0.5	8.1
3-Mo CD Rate (%)	0.0	0.1	-0.9	-24.0	-0.6	-12.4	-0.6	-11.0	-0.8	-13.7	75.4	-25.4	-1.6	-27.3	-1.7	-28.4
Fed Surplus (\$b)	0.0	0.0	10.3	3.9	29.4	-12.1	50.8	-24.5	62.9	-34.7	89.6	-48.9	104.5	-48.9	104.5	-69.8
Current Acct(\$b)	0.1	-0.1	-0.6	1.3	0.3	-0.7	3.4	-8.8	6.5	-20.7	10.6	-31.2	8.0	-15.6	3.1	-7.9
W.A. \$ Exch Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pers Cons Exp	0.0	0.0	0.6	0.0	-1.5	-0.1	-6.1	-0.5	-11.0	-0.8	-17.5	-1.2	-16.2	-1.1	-14.5	-1.0
Bus Fixed Invest	0.0	0.0	1.0	0.4	2.0	0.7	2.9	0.9	3.5	1.0	3.5	1.0	6.4	1.7	9.1	2.2
Bus Genl Inv	0.0	-0.1	0.9	1.2	1.0	1.3	0.9	1.2	0.0	0.0	-0.2	-0.3	3.4	4.6	4.6	5.2
Ch Bus Inv	0.0	-0.2	-0.5	3.7	-0.2	1.6	-0.9	-4.6	-1.7	-8.3	-2.9	-3.9	-0.7	-3.8	0.8	3.4
Net Export G&S	0.0	0.0	0.4	0.0	-0.2	-3.1	-0.8	3.2	-0.7	-0.3	-1.8	-0.3	0.5	-0.2	-0.3	0.0
Exports	0.0	0.0	0.4	0.0	-0.2	-0.3	-0.4	0.1	-0.7	-0.3	-1.1	-0.4	-0.9	-0.3	-0.2	0.0
Imports	0.0	0.0	0.0	0.0	0.6	0.6	-3.0	-0.8	-6.1	-1.7	-12.1	-3.4	-12.1	-3.3	-12.1	-3.3
Govt Purch G&S	0.0	0.0	3.1	0.9	2.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAPAN:																
GNP (80Y billion)	-1.0	0.0	166.0	0.0	318.2	0.1	265.1	0.1	95.9	0.0	-392.8	-0.1	-706.2	-0.2	-146.6	0.0
Nominal GNE (Yb)	0.0	0.0	0.0	0.0	332.4	0.1	362.9	0.0	270.2	0.0	-125.8	0.0	-407.1	-0.1	-111.1	0.0
Pers Cons Exp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus Fixed Invest	0.0	0.0	0.3	0.0	0.8	0.0	1.0	0.0	0.8	0.0	-0.2	0.0	-1.1	0.1	-0.8	0.1
Bus Genl Inv	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unemploy Rate (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bank Lendg Rate (%)	-3.4	0.0	19.5	-0.1	40.8	-0.2	40.4	-0.2	18.9	-0.1	-44.0	0.2	-89.6	0.3	-34.7	0.1
Govt Surplus (Yb)	0.0	0.0	0.6	0.4	0.8	0.5	0.5	0.3	0.0	0.0	-1.2	-0.7	-1.1	-0.7	1.0	0.5
Current Acct (\$b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Y/\$ Exchange Rate	-5.9	0.0	21.4	0.0	57.4	0.0	70.3	0.0	50.6	0.0	-27.9	0.0	-110.7	0.0	-92.8	0.0
Consumptn-Privt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cons-Nonprofit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cons-Government	-2.9	0.0	34.1	0.0	77.9	0.1	73.3	0.1	19.8	0.0	-107.6	-0.1	-206.4	-0.2	-110.4	-0.1
Investment-Busn	-1.6	0.0	17.9	0.1	43.2	0.2	34.9	0.1	33.3	0.0	-63.0	0.0	-108.5	0.4	-48.5	0.2
Inves-Residentl	-2.2	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11.6	0.0	9.0	0.9
Inves-Government	0.0	0.0	8.8	1.2	41.3	1.0	9.6	0.3	-30.9	-0.7	-104.8	-2.4	-11.6	0.0	9.0	0.9
Invnt-Govt-Privt	3.9	0.0	86.4	1.0	93.6	0.9	70.6	1.0	64.7	0.8	-93.0	0.7	-163.9	0.1	45.9	0.2
Net Exports	-1.0	0.0	0.0	0.0	134.3	0.2	102.3	0.1	44.7	0.1	-168.4	-0.7	-263.9	-0.3	23.9	0.0
Exports	-4.9	0.0	28.1	0.0	40.7	0.1	29.5	0.0	-17.9	0.0	-76.4	-0.1	-96.0	-0.1	-22.0	0.0
Imports	-18.8	-0.3	-7.4	-0.1	-5.9	-0.1	-8.0	-0.1	-10.9	-0.1	-36.3	-0.4	-21.8	-0.3	-4.6	-0.1
Real GNP	0.0	0.0	0.5	0.1	0.6	0.1	0.1	0.0	-0.6	-0.1	-2.0	-0.2	-1.5	-0.1	-0.2	0.0
Real Exports	0.0	0.0	2.2	0.1	3.6	0.1	2.2	0.0	0.1	0.0	-6.9	-0.1	-6.1	-0.1	-3.2	0.0
Noml Exports(\$b)																

Notes: Figures are deviations and percent deviations from the baseline solution in billions of 1980 Yen (Japan), billions of 1972 dollars (US), and billions of 1970 dollars (World), unless indicated.

Table 3: U.S., Japan, World Macro Summary / MAXICLBG: ACTIVIST CLINTON SENARIO (3/6)

	1992	%d/f	1993	%d/f	1994	%d/f	1995	%d/f	1996	%d/f	1997	%d/f	1998	%d/f	1999	%d/f
UNITED STATES:																
GNP (725 billion)	0.0	0.0	16.7	0.8	16.7	0.8	-17.5	-0.8	-15.4	-0.7	-12.7	-0.6	-4.9	-0.2	7.5	0.3
Nominal GNP (\$B)	-0.1	0.0	61.8	1.0	92.7	1.4	2.6	0.0	-7.0	-0.1	-37.8	-0.5	-50.6	-0.6	-8.3	-0.1
CPI	0.0	0.0	0.9	0.6	2.8	0.6	3.4	0.7	2.3	0.3	0.1	0.0	-2.0	-0.4	-1.8	-0.3
Employment (mln)	0.0	0.0	0.7	0.6	1.0	0.9	0.0	0.0	-0.4	-0.3	-0.5	-0.4	-0.4	-0.3	-0.1	-0.1
Unemploy Rate (%)	0.0	0.0	-0.5	-2.3	-0.7	-11.2	0.1	1.9	0.4	6.5	0.5	7.6	0.3	5.1	0.0	0.5
3-Mo CD Rate (%)	0.0	0.0	-2.7	-7.1	-1.2	-28.0	-15.4	6.5	-18.3	-13.2	-19.8	-11.3	-11.8	-17.8	-0.4	-8.4
Fed Surplus (\$B)	0.0	0.0	-3.7	-12.5	-11.6	18.4	9.9	9.9	0.4	0.6	4.7	-19.4	-11.8	12.6	8.6	-19.1
Current Acct (\$B)	0.0	-0.1	-3.4	0.0	-7.2	18.6	0.0	-9.9	0.4	-17.6	4.7	-19.4	2.0	-5.7	0.0	-0.7
M.A. \$ Exch Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perf Cons Exp	0.0	0.0	7.3	0.6	10.0	0.8	-3.2	-0.2	-4.5	-0.3	-6.4	-0.5	-4.5	-0.3	0.0	0.0
Bus Fixed Invest	0.0	0.0	1.2	0.4	-0.4	-0.1	-6.6	-1.7	-6.1	-1.8	-7.2	-2.0	-5.5	-1.4	-2.1	0.0
Residential Invs	0.0	0.0	1.6	2.1	-1.1	-1.5	-2.8	-8.2	-2.2	-2.7	-1.7	2.3	4.2	5.5	6.2	6.7
Ch Bus Invent	0.0	-0.1	1.7	15.9	1.4	10.3	-2.8	-15.3	-2.4	-12.6	-1.4	-8.9	0.0	-0.3	2.3	9.6
Net Exports G&S	0.0	0.0	-1.3	5.1	-2.2	8.8	-0.6	2.2	-0.2	0.8	0.6	-1.6	1.0	-2.3	1.1	-2.2
Exports	0.0	0.0	0.2	0.1	0.0	0.0	-0.6	-0.3	-0.6	-0.2	-0.2	-0.1	0.2	0.1	0.5	0.2
Imports	0.0	0.0	1.4	0.6	2.2	0.9	0.0	0.0	0.0	0.0	0.8	-0.3	-0.7	-0.3	-0.6	-0.2
Govt Purch G&S	0.0	0.0	6.2	1.8	9.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAPAN:																
GNP (80Y billion)	3.3	0.0	416.1	0.1	825.5	0.2	382.2	0.1	33.1	0.0	-199.4	0.0	-163.5	0.0	-382.5	-0.1
Nominal GNP (\$B)	0.0	0.0	365.9	0.1	856.9	0.0	563.2	0.0	189.7	0.0	-99.4	0.0	-205.6	0.0	-352.0	-0.1
Employment(X100000)	0.0	0.0	0.8	0.0	2.1	0.0	1.9	0.0	1.0	0.0	0.1	0.0	-0.4	0.0	-0.8	0.0
Unemploy Rate (%)	0.0	0.0	0.0	-0.1	0.0	-0.2	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Bank Lendg Rate(%)	0.0	0.0	0.0	0.0	109.9	-0.5	66.0	-0.3	9.8	0.0	0.0	0.0	-11.0	0.1	0.0	0.0
Govt Surplus (YB)	0.5	0.0	47.4	-0.2	0.0	0.0	-0.2	0.0	0.0	0.0	-0.7	-0.4	-0.1	0.1	-43.6	-0.1
Current Acct (\$B)	0.0	0.0	1.4	1.0	2.3	1.5	-0.2	-0.1	-0.7	0.4	0.0	0.0	0.0	0.0	-0.1	0.0
Y/\$ Exchange Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Consumptn-privt	0.6	0.0	63.2	0.0	163.2	0.1	146.6	0.1	76.9	0.0	4.1	0.0	-31.4	0.0	-63.2	0.0
Cons-Nonprofit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cons-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Investment-Busn	1.0	0.0	87.2	0.1	207.8	0.2	126.6	0.1	-26.8	0.0	-121.4	-0.1	-137.9	0.0	-136.2	-0.1
Invest-Government	0.5	0.0	43.8	0.2	113.2	0.5	61.5	0.3	-46.4	-0.2	-85.7	-0.3	-69.3	-0.1	-43.9	-0.2
Invnt-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Invnt-Govt-Privt	-0.1	0.0	73.5	2.7	111.6	2.8	-32.8	-0.9	-65.3	-1.5	-51.8	-1.2	-7.1	-0.2	-43.9	-0.6
Invnt-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Exports	5.3	0.0	0.0	0.0	238.2	3.2	80.2	1.2	89.4	1.1	62.1	0.5	86.1	0.6	-54.8	-0.3
Net Exports	0.5	0.0	149.2	2.5	349.5	0.4	18.5	0.1	57.1	0.1	16.1	0.1	-27.9	0.1	-11.5	-0.1
Imports	-4.8	0.0	49.1	0.1	111.3	0.1	18.5	0.0	-32.3	0.0	-45.9	-0.1	-78.9	0.0	-16.7	0.0
WORLD:																
Real GNP	0.0	0.0	16.8	0.2	18.2	0.2	-14.6	-0.2	-13.9	-0.2	-12.7	-0.2	-6.2	-0.1	5.4	0.1
Real Exports	0.1	0.0	1.7	0.2	2.5	0.2	-0.2	0.1	-0.6	-0.1	-0.9	-0.1	-0.9	-0.1	-0.6	0.0
Noml Exports(\$B)	0.4	0.0	7.5	0.2	13.8	0.3	4.0	0.0	0.9	0.0	-3.8	-0.1	-8.8	-0.1	-7.3	-0.1

Notes: Figures are deviations and percent deviations from the basing column in billions of 1980 yen (Japan), billions of 1972 dollars (US), and billions of 1970 dollars (World), unless indicated.

Table 4A: U.S., Japan, World Macro Summary / MAXI21A: INCR JAPANESE IMPORTS (3/6)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
UNITED STATES:																
GNP (72\$ billion)	10.0	0.5	16.4	0.8	10.3	0.5	4.7	0.2	0.3	0.0	-0.2	0.0	2.0	0.1	3.2	0.1
Nominal GNP (\$b)	31.9	0.5	61.7	1.0	59.7	0.9	57.0	0.8	45.2	0.6	36.5	0.4	36.5	0.4	37.6	0.4
CPI	0.1	0.0	0.7	0.2	1.5	0.3	2.2	0.5	2.2	0.4	1.7	0.3	1.3	0.2	1.1	0.2
Employment (mil)	0.2	0.2	0.5	0.5	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Unemploy Rate (%)	-0.2	-2.8	-0.4	-5.6	-0.4	-5.9	-0.3	-4.3	-0.1	-2.2	-0.1	-0.9	-0.1	-1.0	-0.1	-1.6
3-Mo CD Rate (%)	0.4	10.4	0.7	27.2	0.8	18.0	0.7	14.9	0.5	10.6	0.3	7.2	0.2	4.8	0.2	4.1
Fed Surplus (\$b)	10.1	-3.5	18.5	-7.2	14.0	-6.6	8.9	-5.7	3.7	-3.1	3.2	-3.1	7.1	-7.6	10.9	-24.1
Current Acct(\$b)	13.3	-24.0	26.6	-61.7	27.0	-69.7	28.7	-81.9	30.6	*****	32.0	*****	32.7	-75.8	35.0	-97.5
W.A. \$ Exch Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pers Cons Exp	3.4	0.3	6.6	0.5	6.1	0.5	4.5	0.3	2.1	0.2	0.9	0.1	0.9	0.1	1.1	0.1
Bus Fixed Invest	0.9	0.4	1.0	0.4	-0.6	-0.2	-2.5	-0.8	-4.7	-1.4	-6.1	-1.7	-6.9	-1.8	-7.1	-1.7
Residential Invs	0.8	1.2	0.0	-0.1	-2.3	-3.0	-3.0	-3.8	-2.3	-2.8	-0.4	-0.5	1.6	2.1	2.1	2.2
Ch Bus Invent	1.1	21.6	1.8	16.2	0.7	4.8	-0.4	-2.1	-1.1	-6.0	-1.0	-6.4	-0.3	-1.7	0.1	0.3
Net Export G&S	3.8	-15.8	7.1	-28.4	6.4	-25.3	6.2	-23.4	6.3	-21.4	6.5	-18.7	6.6	-15.4	7.1	-15.0
Exports	4.8	2.5	9.3	4.5	9.0	4.2	8.9	4.0	8.9	3.8	9.0	3.8	9.1	3.7	9.3	3.6
Imports	1.0	0.5	2.3	1.0	2.6	1.1	2.7	1.1	2.6	1.0	2.5	0.9	2.5	0.9	2.2	0.7
Govt Purch G&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAPAN:																
GNE (80Y billion)	-8188.6	-2.2	-18740.4	-4.8	-20413.9	-5.0	-19586.7	-4.7	-18768.9	-4.4	-17941.6	-4.0	-17107.8	-3.7	-16209.6	-3.3
Nominal GNE (Yb)	-7900.7	-1.7	-19359.0	-4.1	-24556.1	-5.0	-27405.4	-5.3	-29260.6	-5.4	-29934.4	-5.2	-29955.7	-5.0	-29599.6	-4.7
Pers Cons Defl	0.0	0.0	-0.2	-0.2	-1.0	-0.8	-1.8	-1.4	-2.4	-1.8	-2.7	-2.0	-2.9	-2.1	-3.0	-2.1
Employment(X10000)	-24.9	-0.4	-67.7	-1.1	-93.7	-1.6	-108.0	-1.8	-117.5	-1.9	-122.6	-2.0	-124.0	-2.0	-123.4	-1.9
Unemploy Rate (%)	0.0	1.4	0.1	3.7	0.2	4.6	0.1	4.2	0.1	3.3	0.1	2.2	0.0	1.1	0.0	0.1
Bank Lendg Rate(%)	0.0	0.2	0.0	0.4	0.0	-0.2	0.0	-0.6	0.0	-0.6	0.0	-0.4	0.0	-0.3	0.0	-0.2
Govt Surplus (Yb)	-919.6	5.0	-2426.6	12.4	-3202.4	14.9	-3527.4	15.1	-3645.5	14.2	-3654.8	13.3	-3613.0	12.1	-3535.6	11.6
Current Acct (\$b)	-23.1	-19.1	-44.1	-31.4	-42.5	-27.3	-44.8	-26.6	-47.0	-27.4	-49.4	-27.0	-52.6	-33.1	-54.9	-28.3
Y/\$ Exchange Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Consumptn-Privt	-1035.4	-0.5	-3122.3	-1.5	-4745.1	-2.2	-5700.3	-2.6	-6199.2	-2.8	-6379.2	-2.8	-6331.1	-2.7	-6075.2	-2.5
Cons-Nonprofit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cons-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Investment-Busan	-2341.8	-2.9	-6049.8	-7.1	-6972.1	-7.9	-6326.8	-6.9	-5673.1	-5.9	-5049.3	-5.0	-4413.4	-4.1	-3973.4	-3.3
Inves-Residentl	-725.8	-3.7	-2201.9	-10.9	-2726.9	-12.9	-2175.8	-9.0	-1617.0	-6.6	-1192.5	-4.8	-835.7	-3.4	-492.9	-1.9
Inves-Governmnt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Inventry-Privt	-688.9	-30.7	-1411.6	-51.6	-831.2	-20.7	-183.1	-5.1	-6.3	-0.1	81.6	1.9	101.0	2.3	93.2	1.3
Invnt-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Net Exports	-3391.7	*****	-5953.3	*****	-5139.9	-68.3	-5202.1	-75.4	-5284.0	-62.6	-5400.2	-40.2	-5623.9	-36.5	-5759.0	-26.9
Exports	225.0	0.3	667.2	0.8	994.4	1.2	1089.9	1.3	1055.2	1.2	1014.1	1.0	883.0	0.9	889.6	0.8
Imports	3616.7	4.9	6620.5	8.9	6134.2	8.0	6291.9	8.0	6339.2	7.8	6414.2	7.6	6506.9	7.4	6648.6	7.2
WORLD:																
Real GNP	0.1	0.0	-6.0	-0.1	-13.2	-0.2	-16.6	-0.2	-19.6	-0.2	-18.6	-0.2	-15.0	-0.2	-13.1	-0.2
Real Exports	6.3	0.7	12.5	1.3	13.1	1.3	13.7	1.3	13.9	1.2	14.3	1.2	14.2	1.2	14.8	1.1
Noml Exports(\$b)	25.3	0.7	49.4	1.2	51.7	1.1	58.4	1.2	63.2	1.2	67.7	1.2	69.4	1.1	74.9	1.1

Notes: Figures are deviations and percent deviations from the baseline solution in billions of 1980 yen (Japan), billions of 1972 dollars (US), and billions of 1970 dollars (World), unless indicated.

***** denotes % change over three digits.

Table 4B: U.S., Japan, World Merchandise Trade Summary / MAXI21A: INCR JAPANESE IMPORTS (3/6)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
United States:																
Exports	13.89	3.1	27.66	5.7	28.46	5.4	30.60	5.3	32.40	5.2	34.10	5.0	35.41	5.0	37.39	4.6
Imports	3.63	0.7	7.51	1.3	8.18	1.3	8.92	1.3	8.89	1.2	9.15	1.1	9.49	1.1	8.80	0.9
Balance	10.26		20.15		20.28		21.69		23.51		24.95		25.93		28.59	
Exports to Japan	13.14	23.1	26.29	42.8	26.73	40.2	28.30	38.6	29.59	37.5	31.00	36.0	32.43	35.0	33.65	32.5
Imports from Japan	1.43	1.0	3.02	2.0	3.68	2.3	4.53	2.6	4.95	2.6	5.26	2.6	5.48	2.4	5.46	2.2
Balance	11.70		23.27		23.05		23.77		24.63		25.74		26.94		28.19	
Japan:																
Exports	1.96	0.5	3.97	1.0	4.62	1.0	5.87	1.2	6.65	1.3	7.23	1.3	6.92	1.2	7.85	1.2
Imports	18.12	7.5	34.95	13.7	34.82	12.5	37.75	12.7	40.33	12.7	42.99	12.6	45.68	12.6	48.70	12.1
Balance	-16.16		-30.98		-30.20		-31.89		-33.69		-35.76		-38.76		-40.85	
Exports to U.S.	1.43	1.0	3.01	2.0	3.67	2.3	4.57	2.6	5.01	2.7	5.34	2.6	5.51	2.5	5.62	2.2
Imports from U.S.	13.13	23.0	26.29	42.8	26.72	40.2	28.31	38.6	29.61	37.5	31.03	36.1	32.44	35.0	33.70	32.6
Balance	-11.70		-23.27		-23.05		-23.74		-24.60		-25.69		-26.93		-28.08	
Other Indust. Ctries.																
Exports	5.23	0.3	10.11	0.5	11.26	0.5	13.62	0.5	15.30	0.6	16.75	0.6	16.97	0.5	19.26	0.6
Imports	1.77	0.1	3.89	0.2	5.89	0.2	8.42	0.3	10.26	0.4	11.52	0.4	12.00	0.4	13.46	0.4
Balance	3.45		6.22		5.37		5.19		5.04		5.23		4.97		5.79	
EC																
Exports	2.92	0.2	5.74	0.4	6.68	0.4	8.28	0.4	9.47	0.5	10.44	0.5	10.42	0.4	12.02	0.5
Imports	1.16	0.1	2.87	0.2	4.58	0.3	6.53	0.3	8.06	0.4	9.09	0.4	9.46	0.4	10.47	0.4
Balance	1.75		2.87		2.09		1.75		1.41		1.35		0.96		1.55	
Developing Countries																
Exports	3.99	0.5	7.35	0.8	6.95	0.7	7.71	0.8	8.19	0.8	8.84	0.8	9.82	0.8	10.77	0.8
Imports	1.63	0.2	3.23	0.4	3.05	0.3	3.55	0.4	4.09	0.4	4.51	0.4	3.63	0.3	5.30	0.4
Balance	2.36		4.12		3.90		4.17		4.10		4.33		6.19		5.46	
Asian NIEs																
Exports	1.62	0.5	3.19	1.0	3.18	0.9	3.61	1.0	3.96	1.0	4.32	1.0	4.68	1.1	4.99	1.1
Imports	0.94	0.3	1.90	0.7	2.01	0.6	2.45	0.7	2.96	0.8	3.37	0.9	2.58	0.8	4.02	1.0
Balance	0.68		1.29		1.17		1.16		1.00		0.95		2.10		0.97	
C.P.E. excl. China																
Exports	1.62	0.5	3.19	1.0	3.18	0.9	3.61	1.0	3.96	1.0	4.32	1.0	4.68	1.1	4.99	1.1
Imports	0.94	0.3	1.90	0.7	2.01	0.6	2.45	0.7	2.96	0.8	3.37	0.9	2.58	0.8	4.02	1.0
Balance	0.68		1.29		1.17		1.16		1.00		0.95		2.10		0.97	
World:																
Exports	25.27	0.7	49.45	1.2	51.72	1.1	58.40	1.2	63.23	1.2	67.73	1.2	69.41	1.1	74.95	1.1
Real Export (70\$b)	6.26	0.7	12.47	1.3	13.13	1.3	13.74	1.3	13.92	1.2	14.25	1.2	14.15	1.2	14.82	1.1

NOTES: Figures are deviations and percent deviations from the baseline solution in billions of current dollars.

Table 4C: Real World Gross National Product (Bill. 1970 U.S. \$) / MAXI21A: INCR JAPANESE IMPORTS (3/6)

	1992	%chg	1993	%chg	1994	%chg	1995	%chg	1996	%chg	1997	%chg	1998	%chg	1999	%chg
U.S.	9.07	0.5	14.84	0.8	9.31	0.5	4.27	0.2	0.24	0.0	-0.20	0.0	1.80	0.1	2.90	0.1
Japan	-10.94	-2.2	-25.03	-4.8	-27.27	-5.0	-26.16	-4.7	-25.07	-4.4	-23.96	-4.0	-22.85	-3.7	-21.65	-3.3
Other Indust. Countries	1.43	0.1	3.17	0.1	3.61	0.1	3.82	0.2	3.72	0.1	3.76	0.1	3.54	0.1	3.24	0.1
Canada	0.29	0.2	0.66	0.3	0.58	0.3	0.49	0.2	0.33	0.1	0.29	0.1	0.26	0.1	0.27	0.1
Australia, N.Z.	0.11	0.1	0.19	0.2	0.19	0.2	0.22	0.3	0.24	0.3	0.26	0.3	0.28	0.3	0.31	0.3
EC	0.95	0.1	2.13	0.1	2.54	0.1	2.74	0.1	2.81	0.1	2.83	0.1	2.57	0.1	2.19	0.1
Rest of Industrialized	0.08	0.0	0.20	0.1	0.29	0.1	0.37	0.1	0.34	0.1	0.39	0.1	0.42	0.1	0.47	0.1
Developing Countries	0.60	0.0	1.06	0.1	1.12	0.1	1.41	0.1	1.69	0.1	1.93	0.1	2.59	0.2	2.47	0.1
OPEC	0.05	0.0	0.03	0.0	-0.02	0.0	-0.02	0.0	-0.04	0.0	-0.03	0.0	-0.01	0.0	0.00	0.0
Africa	0.06	0.1	0.11	0.2	0.11	0.2	0.11	0.2	0.11	0.2	0.09	0.1	0.10	0.1	0.10	0.2
Asia incl China	0.36	0.1	0.56	0.1	0.59	0.1	0.84	0.1	1.12	0.1	1.29	0.1	1.86	0.2	1.66	0.2
Asian NIEs	0.30	0.3	0.61	0.5	0.61	0.5	0.63	0.5	0.65	0.5	0.67	0.5	1.10	0.7	0.81	0.6
Middle East non-oil	0.00	0.0	0.00	0.0	0.01	0.0	0.01	0.0	0.01	0.0	0.03	0.0	0.04	0.1	0.05	0.1
Western Hemisphere	0.14	0.0	0.35	0.1	0.42	0.1	0.47	0.1	0.49	0.1	0.55	0.1	0.61	0.2	0.65	0.2
C.P.E. excl China	0.00	0.0	0.01	0.0	0.04	0.0	0.04	0.0	-0.12	0.0	-0.10	0.0	-0.09	0.0	-0.08	0.0
World Total	0.15	0.0	-5.95	-0.1	-13.19	-0.2	-16.63	-0.2	-19.54	-0.2	-18.58	-0.2	-15.01	-0.2	-13.12	-0.2

NOTES: Figures are deviations and percent deviations from the baseline solution in billions of 1970 dollars.

Table 4D: U.S., Japan Industry Detail, Selected Industries / MAXI21A: INCR JAPANESE IMPORTS (3/6)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
United States: Gross Output (\$25 million)																
Mining, Metl	74.8	1.9	109.8	2.4	35.9	0.7	-31.2	-0.6	-77.4	-1.3	-77.8	-1.3	-51.5	-0.8	-29.1	-0.4
Textiles	384.5	1.0	569.9	1.4	287.0	0.7	105.7	0.2	-29.9	-0.1	-12.6	0.0	112.1	0.2	160.0	0.3
Rubber, Plast	303.5	0.9	511.6	1.4	340.1	0.9	177.3	0.4	39.5	0.1	17.5	0.0	74.4	0.2	110.1	0.2
Iron & Steel	575.5	2.6	913.5	3.8	473.1	1.8	72.9	0.3	-213.2	-0.8	-237.6	-0.9	-110.1	-0.4	-1.8	0.0
Fabr Metal	789.6	1.2	1175.9	1.7	465.5	0.6	-130.3	-0.2	-545.1	-0.7	-571.1	-0.7	-374.5	-0.4	-278.4	-0.3
Nonel machin	1001.7	0.7	1534.4	1.0	680.0	0.4	-163.2	-0.1	-922.3	-0.5	-1199.2	-0.6	-1152.1	-0.5	-989.1	-0.4
Elect Machin	2135.6	2.1	3949.5	3.8	3353.9	3.1	2710.2	2.5	2117.3	2.0	1930.2	1.8	2072.2	2.0	2217.6	2.0
Automobiles	3372.6	3.6	6128.4	6.1	4691.7	4.4	3044.8	2.7	1658.2	1.4	1164.9	1.0	1256.0	1.0	1407.9	1.1
Aircraft	1023.1	5.1	1903.1	8.8	1651.0	7.3	1389.4	6.1	1165.1	5.2	1128.0	5.3	1226.4	5.6	1305.2	5.5
Util, Elec	126.5	0.4	357.4	0.7	323.4	0.6	256.0	0.5	160.7	0.3	107.4	0.2	106.9	0.2	111.6	0.2
Wholesale, Retl	2274.6	0.5	3922.1	0.8	2848.1	0.6	1591.6	0.3	314.4	0.1	-86.2	0.0	234.6	0.0	432.9	0.1
Manuf. Tot.	13752.0	1.2	23167.0	2.0	15315.0	1.2	7967.0	0.6	2184.0	0.2	1301.0	0.1	3665.0	0.3	5441.0	0.4
United States: Employment (thousands)																
Dur, Elec & El	23.1	1.1	52.0	2.5	57.7	2.8	51.3	2.6	40.8	2.1	32.9	1.8	29.8	1.6	29.0	1.6
Dur, Mach excl E	15.2	0.6	32.2	1.3	29.4	1.2	13.7	0.5	-6.2	-0.2	-20.5	-0.8	-25.8	-1.0	-24.0	-0.8
Dur, Motor Vehic	14.4	1.8	31.7	4.0	33.8	4.1	26.8	3.1	17.0	1.9	9.7	1.1	6.6	0.7	5.7	0.6
Dur, Fab Metal	13.0	0.9	26.7	1.9	23.9	1.7	13.3	0.9	2.4	0.2	-2.2	-0.2	1.0	0.1	7.1	0.5
Dur, Pri Metal	9.8	0.9	22.1	2.0	23.8	2.2	17.2	1.6	7.4	0.7	-0.1	0.0	2.0	0.2	1.9	0.2
Nondur, Rubber &	3.6	0.4	8.4	1.0	9.1	1.0	7.1	0.8	4.1	0.5	2.0	0.2	1.6	0.2	1.9	0.2
Transp	9.9	0.3	22.3	0.7	25.6	0.9	24.6	0.8	22.3	0.7	22.8	0.8	27.1	0.9	32.8	1.1
Services	25.0	0.1	66.8	0.3	95.2	0.4	110.2	0.4	111.6	0.4	107.6	0.4	105.4	0.4	104.7	0.4
Wholesale & Retail	57.1	0.2	135.5	0.5	162.5	0.6	152.4	0.6	117.7	0.4	86.5	0.3	74.5	0.3	71.6	0.2
All Priv Sec	233.4	0.3	519.0	0.6	556.5	0.6	450.7	0.5	294.7	0.3	199.4	0.2	203.9	0.2	244.9	0.3
Japan: Gross Output (\$0X million)																
Rubber Products	-47.0	-2.1	-107.9	-4.4	-105.8	-3.9	-70.6	-2.7	-43.1	-1.5	-26.9	-0.9	-19.2	-0.7	-10.8	-0.3
Petroleum Prods	-113.7	-0.7	-314.4	-2.0	-403.8	-2.4	-454.3	-2.7	-490.7	-2.7	-512.1	-2.8	-523.6	-2.7	-516.5	-2.5
Roll, Cast, Forge	-94.7	-0.5	-284.1	-1.6	-306.8	-1.6	-186.9	-1.0	-53.6	-0.3	-1.5	0.0	21.0	0.1	43.5	0.2
Oth Nonferrous	-204.1	-3.3	-584.2	-9.3	-695.6	-10.6	-529.4	-7.7	-382.3	-5.3	-314.1	-4.2	-280.3	-3.6	-262.5	-3.1
Metal Products	-360.5	-2.5	-911.3	-5.9	-1005.6	-6.2	-908.0	-5.3	-881.4	-4.9	-842.7	-4.5	-801.1	-4.1	-765.2	-3.5
Machinery	-934.5	-2.8	-2155.3	-6.1	-2305.4	-6.1	-2153.8	-5.5	-2073.1	-4.9	-1985.7	-4.5	-1913.4	-4.1	-1855.9	-3.5
Electr Machinry	-3056.8	-6.4	-6822.1	-12.8	-7092.8	-12.2	-6605.3	-10.3	-6389.5	-9.1	-6236.7	-8.1	-6103.7	-7.2	-6085.6	-6.2
Automobiles	-813.3	-3.5	-1964.3	-8.1	-2234.3	-8.8	-2104.1	-8.0	-2022.7	-7.4	-1981.7	-6.9	-1969.2	-6.6	-1966.1	-6.1
Indus Construct	-497.7	-1.9	-1297.2	-4.9	-1523.7	-5.5	-1402.4	-4.9	-1265.6	-4.3	-1144.0	-3.7	-1022.9	-3.1	-934.3	-2.6
Electric Power	-197.1	-1.3	-464.6	-3.0	-496.8	-3.0	-448.9	-2.7	-425.6	-2.4	-408.0	-2.2	-393.0	-2.1	-384.8	-1.9
Wholesale & Retail	-853.8	-1.1	-1997.4	-2.5	-2312.2	-2.7	-2376.1	-2.7	-2421.5	-2.7	-2370.9	-2.5	-2302.2	-2.2	-2207.2	-2.0
Finance & Insr	-339.7	-1.4	-788.6	-3.1	-872.5	-3.2	-856.9	-3.1	-857.1	-3.0	-844.4	-2.8	-826.9	-2.7	-803.8	-2.5
Total	-14301.4	-2.0	-33741.8	-4.5	-36818.4	-4.7	-34571.0	-4.2	-33145.4	-3.9	-31613.2	-3.6	-30220.6	-3.3	-28848.1	-2.9
Japan: Employment (thousands)																
Natural Textile	-3.3	-4.6	-8.2	-11.4	-10.6	-14.4	-11.7	-15.2	-12.0	-14.8	-11.6	-13.8	-10.7	-12.8	-10.1	-11.2
Rubber Prods	-0.9	-0.6	-2.4	-1.5	-2.9	-1.9	-2.8	-1.8	-2.3	-1.5	-1.8	-1.1	-1.3	-0.8	-0.8	-0.5
Cement	-0.1	-0.5	-0.3	-1.1	-0.3	-1.1	-0.3	-1.1	-0.3	-0.9	-0.2	-0.7	-0.1	-0.5	-0.1	-0.3
Oth Nonferr Met	-0.7	-0.5	-2.2	-1.4	-2.7	-1.7	-2.0	-1.2	-1.2	-0.7	-0.8	-0.5	-0.6	-0.4	-0.5	-0.3
Metal Prods	-6.2	-0.6	-14.6	-1.4	-15.8	-1.5	-14.0	-1.3	-12.7	-1.2	-11.2	-1.0	-9.8	-0.9	-8.4	-0.8
Machinery	-13.6	-1.0	-32.5	-2.4	-37.8	-2.8	-37.0	-2.7	-34.5	-2.4	-31.2	-2.1	-28.2	-1.9	-24.7	-1.6
Elec Machnry	-48.5	-2.3	-109.1	-5.1	-117.2	-5.3	-105.6	-4.6	-96.2	-4.0	-87.1	-3.5	-78.4	-3.0	-69.9	-2.5
Motor Vehicles	0.2	0.0	-6.1	-0.7	-18.1	-2.0	-25.0	-2.7	-26.2	-2.8	-25.5	-2.7	-24.3	-2.5	-23.4	-2.4
Housing	-8.1	-0.8	-28.1	-2.7	-47.2	-4.5	-57.3	-5.4	-61.7	-5.7	-62.2	-5.6	-60.0	-5.3	-55.9	-4.8
Trucks & Buses	-10.7	-0.6	-27.2	-1.4	-30.7	-1.6	-27.8	-1.4	-25.8	-1.3	-23.7	-1.2	-21.9	-1.0	-20.6	-1.0
Total	-245.6	-0.4	-667.1	-1.1	-922.6	-1.6	-1064.2	-1.8	-1157.0	-1.9	-1207.2	-2.0	-1221.8	-2.0	-1215.6	-1.9

Notes: Figures are deviations and percent deviations from the baseline solution.

Table 5A: U.S., Japan, World Macro Summary / MAXI22 3: MIXED JA IMPORTS STIMULUS (3/18)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
UNITED STATES:																
GNP (72\$ billion)	10.7	0.6	19.0	1.0	14.7	0.7	9.0	0.4	4.1	0.2	1.9	0.1	2.1	0.1	3.3	0.1
Nominal GNP (\$b)	34.6	0.6	73.6	1.2	84.2	1.3	90.9	1.3	87.9	1.2	81.7	1.0	77.9	0.9	78.7	0.8
CPI	0.5	0.1	1.6	0.4	2.8	0.6	4.1	0.9	4.7	0.9	4.5	0.9	4.2	0.8	3.9	0.7
Employment (mil.)	0.3	0.2	0.6	0.5	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.2
Unemploy Rate (%)	-0.2	-2.9	-0.5	-6.3	-0.5	-7.5	-0.4	-6.2	-0.2	-4.3	-0.1	-2.2	-0.1	-1.4	-0.1	-1.5
3-Mo CD Rate (%)	0.4	11.4	0.9	32.8	1.1	25.3	1.1	23.3	1.0	20.4	0.8	18.1	0.6	13.7	0.5	11.3
Fed Surplus (\$b)	9.6	-3.3	19.1	-7.4	17.4	-8.2	12.8	-8.2	7.6	-6.4	5.8	-5.7	7.5	-8.0	11.4	-25.1
Current Acct(\$b)	11.1	-20.1	24.5	-56.9	29.2	-75.3	34.2	-97.5	39.6	*****	43.6	*****	45.7	*****	50.1	*****
W.A. \$ Exch Rate	0.9	0.9	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.9	1.9	1.9	1.8	1.9
Pers Cons Exp	3.1	0.2	6.6	0.5	7.1	0.5	5.7	0.4	3.3	0.2	1.4	0.1	0.5	0.0	0.3	0.0
Bus Fixed Invest	1.0	0.4	1.1	0.4	-0.7	-0.2	-3.3	-1.0	-6.3	-1.9	-8.8	-2.4	-10.7	-2.7	-11.8	-2.8
Residential Invs	0.7	1.0	-0.2	-0.2	-2.4	-3.2	-3.7	-4.6	-3.4	-4.2	-1.5	-2.1	0.6	0.8	1.7	1.8
Ch Bus Invent	1.2	23.0	2.0	18.5	1.1	7.9	-0.1	-0.3	-1.0	-5.2	-1.1	-7.1	-0.7	-3.9	-0.2	-0.9
Net Export G&S	4.8	-19.6	9.5	-38.2	9.7	-38.4	10.3	-39.1	11.3	-38.7	12.0	-34.5	12.3	-28.5	13.3	-28.2
Exports	5.1	2.6	9.9	4.8	9.7	4.5	9.6	4.3	9.4	4.1	9.5	4.0	9.6	3.9	9.7	3.7
Imports	0.3	0.1	0.4	0.2	0.0	0.0	-0.8	-0.3	-1.9	-0.7	-2.5	-0.9	-2.7	-0.9	-3.6	-1.2
Govt Purch G&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAPAN:																
GNE (80Y billion)	-2132.6	-0.6	-4909.7	-1.3	-4105.9	-1.0	-2434.8	-0.6	-1042.7	-0.2	516.6	0.1	2562.3	0.5	3655.4	0.7
Nominal GNE (Yb)	-5266.4	-1.1	-14278.0	-3.0	-18378.4	-3.7	-18888.4	-3.6	-17640.9	-3.2	-16154.4	-2.8	-14291.9	-2.4	-13652.4	-2.2
Pers Cons Defl	-1.7	-1.4	-4.1	-3.2	-5.1	-4.0	-5.6	-4.3	-5.8	-4.3	-5.8	-4.2	-5.9	-4.2	-5.9	-4.2
Employment (x10000)	-19.4	-0.3	-53.6	-0.9	-71.0	-1.2	-79.7	-1.3	-81.7	-1.3	-82.3	-1.3	-79.8	-1.3	-78.2	-1.2
Unemploy Rate (%)	0.0	0.4	0.0	0.9	0.0	0.7	0.0	0.1	0.0	-0.5	0.0	-1.1	-0.1	-1.6	-0.1	-1.8
Bank Lendy Rate(%)	-0.2	-3.6	-0.5	-8.1	-0.5	-8.0	-0.5	-7.5	-0.4	-7.0	-0.4	-6.9	-0.4	-7.0	-0.4	-7.0
Govt Surplus (Yb)	-4030.2	22.1	-7906.1	40.3	-7781.2	36.1	-7789.9	33.2	-7792.2	30.5	-7690.4	27.9	-7448.9	25.0	-7341.9	24.1
Current Acct (\$b)	-19.3	-15.9	-39.2	-28.0	-42.4	-27.2	-47.1	-28.0	-53.0	-30.9	-57.7	-31.6	-62.3	-39.2	-66.3	-34.3
Y/\$ Exchange Rate	-5.6	-4.4	-11.3	-8.9	-11.1	-8.9	-10.9	-8.9	-10.8	-8.9	-10.6	-8.9	-10.5	-8.9	-10.3	-8.9
Consumptn-Privt	140.9	0.1	211.6	0.1	356.7	0.2	901.4	0.4	1637.4	0.7	2436.5	1.1	3327.5	1.4	4185.7	1.8
Cons-Nonprofit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cons-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Investment-Busn	-1295.6	-1.6	-3154.0	-3.7	-2749.7	-3.1	-1623.2	-1.8	-521.2	-0.5	382.8	0.4	1431.1	1.3	2245.2	1.9
Inves-Residentl	96.4	0.5	139.9	0.7	185.6	0.9	503.5	2.1	886.9	3.6	1120.3	4.5	1318.8	5.3	1449.2	5.5
Inves-Govtment	3500.7	12.0	7001.5	23.0	7001.5	22.0	7001.5	21.0	7001.5	20.1	7001.5	19.2	7001.5	18.4	7001.5	17.6
Inventory-Privt	-199.4	-8.9	-479.9	-17.5	-114.6	-2.9	144.6	4.0	185.3	4.2	219.6	5.1	410.0	9.5	303.4	4.4
Invt-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Exports	-4372.1	*****	-8611.6	*****	-8786.2	*****	-9371.6	*****	-10248.0	*****	-10650.6	-79.3	-10922.1	-70.9	-11540.1	-53.9
Exports	151.0	0.2	332.2	0.4	258.0	0.3	-58.6	-0.1	-571.4	-0.6	-680.3	-0.7	-597.2	-0.6	-915.6	-0.8
Imports	4523.1	6.2	8943.8	12.1	9044.2	11.8	9303.0	11.8	9676.6	11.8	9970.2	11.8	10324.9	11.8	10624.4	11.6
WORLD:																
Real GNP	10.4	0.1	18.1	0.3	15.8	0.2	12.9	0.2	9.5	0.1	9.8	0.1	12.6	0.2	14.7	0.2
Real Exports	6.1	0.7	11.9	1.2	12.2	1.2	11.8	1.1	11.0	1.0	11.0	0.9	11.1	0.9	11.2	0.9
Noml Exports(\$b)	33.0	0.9	64.1	1.5	66.9	1.5	74.3	1.5	81.0	1.5	85.2	1.5	86.7	1.4	93.6	1.4

Notes: Figures are deviations and percent deviations from the baseline solution in billions of 1980 yen (Japan), billions of 1972 dollars (US), and billions of 1970 dollars (World), unless indicated.

***** denotes % change over three digits.

Table 5B: U.S., Japan World Merchandise Trade Summary / MAXI22 3: MIXED JA IMPORTS STIMULUS (3/18)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
United States:																
Exports	15.50	3.5	31.74	6.6	33.28	6.3	36.06	6.3	38.84	6.2	41.09	6.1	42.62	6.0	45.13	5.6
Imports	3.80	0.7	5.70	1.0	3.32	0.5	1.18	0.2	-1.73	-0.2	-3.82	-0.5	-4.75	-0.5	-7.57	-0.8
Balance	11.69		26.04		29.97		34.87		40.57		44.91		47.37		52.70	
Exports to Japan	14.14	24.8	29.01	47.2	29.93	45.0	31.72	43.3	33.56	42.5	35.25	41.0	37.04	40.0	38.77	37.5
Imports from Japan	2.08	1.5	2.87	1.9	0.82	0.5	-0.15	-0.1	-1.15	-0.6	-1.96	-1.0	-2.30	-1.0	-3.81	-1.5
Balance	12.06		26.15		29.11		31.87		34.71		37.20		39.34		42.58	
Japan:																
Exports	3.48	0.9	5.54	1.4	3.65	0.8	3.44	0.7	3.29	0.6	2.79	0.5	1.83	0.3	1.41	0.2
Imports	21.48	8.9	44.00	17.2	46.20	16.6	50.24	16.9	54.64	17.2	58.70	17.2	62.97	17.4	67.65	16.9
Balance	-18.00		-38.46		-42.55		-46.80		-51.35		-55.91		-61.14		-66.24	
Exports to U.S.	2.07	1.5	2.87	1.9	0.83	0.5	-0.09	0.0	-1.08	-0.6	-1.86	-0.9	-2.27	-1.0	-3.63	-1.4
Imports from U.S.	14.13	24.8	28.93	47.1	29.85	44.9	31.65	43.2	33.48	42.4	35.26	41.0	37.03	40.0	38.66	37.4
Balance	-12.06		-26.07		-29.02		-31.74		-34.56		-37.11		-39.30		-42.29	
Other Indust. Ctries.																
Exports	7.95	0.4	15.54	0.7	17.48	0.8	20.65	0.8	23.16	0.9	24.54	0.8	24.42	0.8	27.01	0.8
Imports	3.90	0.2	8.14	0.4	10.22	0.4	13.51	0.5	16.29	0.6	17.24	0.6	16.96	0.5	18.03	0.5
Balance	4.04		7.41		7.26		7.14		6.87		7.30		7.46		8.98	
EC																
Exports	4.73	0.3	9.40	0.6	10.82	0.6	13.13	0.7	15.07	0.8	16.04	0.7	15.75	0.7	17.55	0.7
Imports	2.56	0.2	5.52	0.3	7.12	0.4	9.53	0.5	11.66	0.6	12.38	0.5	12.17	0.5	13.05	0.5
Balance	2.18		3.88		3.70		3.61		3.41		3.66		3.58		4.50	
Developing Countries																
Exports	5.65	0.7	10.38	1.2	11.44	1.2	12.77	1.2	14.05	1.3	14.96	1.3	16.04	1.3	18.04	1.3
Imports	3.52	0.4	6.68	0.8	7.09	0.8	9.05	0.9	11.31	1.1	12.30	1.1	11.73	1.0	14.53	1.2
Balance	2.13		3.70		4.35		3.71		2.74		2.65		4.32		3.51	
Asian NIEs																
Exports	2.12	0.7	4.19	1.3	4.43	1.3	4.93	1.3	5.35	1.4	5.66	1.3	6.07	1.4	6.40	1.4
Imports	1.77	0.7	3.59	1.2	3.92	1.3	4.62	1.4	5.39	1.5	5.75	1.5	4.66	1.4	6.25	1.6
Balance	0.35		0.61		0.51		0.31		-0.04		-0.09		1.41		0.15	
C.P.E. excl. China																
Exports	2.12	0.7	4.19	1.3	4.43	1.3	4.93	1.3	5.35	1.4	5.66	1.3	6.07	1.4	6.40	1.4
Imports	1.77	0.7	3.59	1.2	3.92	1.3	4.62	1.4	5.39	1.5	5.75	1.5	4.66	1.4	6.25	1.6
Balance	0.35		0.61		0.51		0.31		-0.04		-0.09		1.41		0.15	
World:																
Exports	33.03	0.9	64.13	1.5	66.95	1.5	74.32	1.5	81.00	1.5	85.16	1.5	86.70	1.4	93.63	1.4
Real Export (70\$b)	6.09	0.7	11.90	1.2	12.16	1.2	11.81	1.1	11.01	1.0	10.99	0.9	11.10	0.9	11.17	0.9

NOTES: Figures are deviations and percent deviations from the baseline solution in billions of current dollars.

Table 5C: Real World Gross National Product (Bill. 1970 U.S. \$) / MAXI22 3: MIXED JA IMPORTS STIMULUS (3/18)

	1992	%chg	1993	%chg	1994	%chg	1995	%chg	1996	%chg	1997	%chg	1998	%chg	1999	%chg
U.S.	9.69	0.6	17.20	1.0	13.30	0.7	8.10	0.4	3.68	0.2	1.76	0.1	1.89	0.1	3.00	0.1
Japan	-2.85	-0.6	-6.56	-1.3	-5.48	-1.0	-3.25	-0.6	-1.39	-0.2	0.69	0.1	3.42	0.5	4.88	0.7
Other Indust. Countries	2.64	0.1	5.41	0.2	5.50	0.2	5.40	0.2	5.28	0.2	5.10	0.2	4.66	0.2	3.75	0.1
Canada	0.26	0.1	0.47	0.2	0.39	0.2	0.26	0.1	0.10	0.0	0.00	0.0	0.01	0.0	0.11	0.0
Australia, N.Z.	0.19	0.2	0.38	0.5	0.43	0.5	0.49	0.6	0.54	0.6	0.56	0.7	0.59	0.7	0.65	0.7
EC	2.07	0.1	4.26	0.2	4.27	0.2	4.13	0.2	4.16	0.2	4.00	0.2	3.48	0.2	2.33	0.1
Rest of Industrialized	0.12	0.0	0.30	0.1	0.41	0.2	0.52	0.2	0.48	0.2	0.54	0.2	0.59	0.2	0.66	0.2
Developing Countries	0.94	0.1	2.02	0.2	2.42	0.2	2.64	0.2	2.88	0.2	3.20	0.2	3.70	0.2	4.14	0.2
OPEC	0.11	0.1	0.22	0.2	0.25	0.2	0.24	0.2	0.25	0.2	0.26	0.2	0.30	0.2	0.35	0.2
Africa	0.07	0.1	0.13	0.2	0.14	0.2	0.15	0.2	0.16	0.3	0.15	0.2	0.16	0.2	0.15	0.2
Asia incl China	0.61	0.1	1.32	0.2	1.57	0.2	1.71	0.2	1.80	0.2	1.96	0.2	2.26	0.2	2.51	0.2
Asian NIEs	0.29	0.3	0.58	0.5	0.57	0.5	0.54	0.4	0.51	0.4	0.51	0.4	0.62	0.4	0.59	0.4
Middle East non-oil	0.00	0.0	0.02	0.0	0.03	0.1	0.02	0.0	0.02	0.0	0.02	0.0	0.04	0.1	0.05	0.1
Western Hemisphere	0.14	0.0	0.33	0.1	0.43	0.1	0.53	0.2	0.66	0.2	0.80	0.2	0.94	0.2	1.07	0.3
C.P.E. excl China	-0.01	0.0	0.02	0.0	0.04	0.0	0.02	0.0	-0.95	-0.1	-1.00	-0.1	-1.06	-0.1	-1.11	-0.1
World Total	10.41	0.1	18.10	0.3	15.78	0.2	12.91	0.2	9.49	0.1	9.75	0.1	12.62	0.2	14.66	0.2

NOTES: Figures are deviations and percent deviations from the baseline solution in billions of 1970 dollars.

Table 5D: U.S., Japan Industry Detail, Selected Industries / MAXI22 3: MIXED JA IMPORTS STIMULUS (3/18)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
United States: Gross Output (72\$ million)																
Mining, Metl	91.1	2.3	158.0	3.5	109.5	2.2	45.3	0.8	-3.3	-0.1	-19.8	-0.3	-11.5	-0.2	16.6	0.2
Textiles	397.9	1.0	639.1	1.6	424.1	1.0	236.7	0.5	80.8	0.2	44.9	0.1	105.1	0.2	176.0	0.4
Rubber,Plast	339.3	1.0	614.9	1.7	483.7	1.3	316.9	0.8	168.6	0.4	96.5	0.2	91.9	0.2	128.1	0.3
Iron & Steel	623.6	2.8	1057.1	4.4	732.2	2.8	344.9	1.3	38.3	0.1	-122.7	-0.4	-152.5	-0.5	-56.7	-0.2
Fabr Metal	858.2	1.3	1423.8	2.0	878.9	1.2	262.4	0.3	-202.2	-0.3	-375.7	-0.5	-354.9	-0.4	-263.2	-0.3
Nonel machin	1212.2	0.8	2066.9	1.3	1297.6	0.8	333.9	0.2	-581.9	-0.3	-1176.6	-0.6	-1442.6	-0.7	-1333.4	-0.6
Elect Machin	2335.9	2.3	4585.3	4.4	4365.4	4.1	3880.5	3.6	3345.6	3.1	3078.8	2.9	3161.1	3.0	3457.8	3.1
Automobiles	3423.6	3.7	6587.2	6.6	5812.6	5.4	4369.9	3.8	2968.4	2.5	2142.9	1.8	1931.5	1.6	2133.0	1.6
Aircraft	1054.5	5.2	1987.4	9.2	1772.1	7.9	1489.7	6.6	1241.9	5.5	1121.5	5.2	1099.5	5.0	1149.0	4.8
Util, Elec	194.5	0.4	394.4	0.7	403.1	0.7	354.7	0.6	272.6	0.5	202.6	0.3	166.2	0.3	163.9	0.3
Whlsale, Retl	2232.9	0.5	4071.3	0.8	3321.0	0.7	1910.7	0.4	376.2	0.1	-533.9	-0.1	-785.9	-0.1	-767.1	-0.1
Manuf. Tot.	14730.0	1.3	26665.0	2.3	21279.0	1.7	14168.0	1.1	8231.0	0.6	5400.0	0.4	5241.0	0.4	7209.0	0.5
United States: Employment (thousands)																
Dur, Elec & El	25.3	1.2	59.6	2.9	71.5	3.5	69.1	3.5	60.3	3.1	51.6	2.8	47.0	2.6	46.3	2.6
Dur, Mach excl E	18.3	0.8	42.1	1.8	44.6	1.8	29.9	1.2	8.2	0.3	-11.4	-0.4	-23.6	-0.9	-25.9	-0.9
Dur, Motor Vehic	14.6	1.8	33.5	4.2	39.0	4.8	34.4	4.0	25.4	2.8	17.0	1.8	11.8	1.2	10.0	1.0
Dur, Fab Metal	14.2	1.0	31.4	2.2	33.6	2.3	26.0	1.8	16.6	1.1	11.3	0.8	12.6	0.9	19.3	1.3
Dur, Pri Metal	11.0	1.0	26.3	2.4	32.3	3.0	29.3	2.7	21.9	2.0	14.5	1.3	10.3	1.0	10.4	0.9
Nondur, Rubber &	4.1	0.5	9.9	1.1	11.6	1.3	10.2	1.1	7.4	0.8	4.7	0.5	3.2	0.4	2.9	0.3
Transp	10.7	0.4	25.9	0.9	32.8	1.1	34.6	1.2	34.6	1.2	36.4	1.2	41.8	1.4	50.3	1.6
Services	25.8	0.1	72.2	0.3	110.0	0.4	135.0	0.5	146.4	0.5	148.6	0.6	147.3	0.5	146.5	0.5
Whlsale & Retail	56.1	0.2	138.7	0.5	176.9	0.7	171.4	0.6	134.9	0.5	91.8	0.3	59.9	0.2	41.3	0.3
All Priv Sec	243.7	0.3	571.5	0.6	672.9	0.7	601.4	0.7	456.0	0.5	332.1	0.4	276.1	0.3	283.9	0.3
Japan: Gross Output (80Y million)																
Rubber Products	-46.9	-2.1	-102.8	-4.2	-41.9	-1.6	-37.9	-1.4	-22.5	-0.8	-16.5	-0.6	6.1	0.2	-13.4	-0.4
Petroleum Prods	-56.7	-0.4	112.3	0.7	415.0	2.5	411.1	2.4	505.6	2.8	582.2	3.1	691.6	3.6	816.4	4.0
Roll,Cast,Forge	229.5	1.3	731.1	4.0	1185.9	6.1	1315.6	6.7	1465.9	7.2	1552.9	7.6	1611.8	8.0	1672.8	7.9
Oth Nonferrous	-135.9	-2.2	-413.8	-6.6	-511.9	-7.8	-390.3	-5.7	-268.4	-3.7	-200.8	-2.7	-138.2	-1.8	-94.7	-1.1
Metal Products	-76.8	-0.5	-216.7	-1.4	-114.3	-0.7	34.6	0.2	157.7	0.9	292.3	1.5	445.8	2.3	536.9	2.5
Machinery	-916.7	-2.7	-2152.8	-6.1	-2094.4	-5.6	-1906.2	-4.9	-1834.1	-4.4	-1711.4	-3.9	-1428.1	-3.1	-1533.9	-2.9
Electr Machinery	-1842.0	-3.9	-3973.8	-7.5	-3664.2	-6.3	-2901.0	-4.5	-2397.6	-3.4	-1900.2	-2.5	-1278.4	-1.5	-860.4	-0.9
Automobiles	-800.0	-3.5	-2030.8	-8.4	-2326.7	-9.1	-2182.8	-8.2	-2125.0	-7.7	-2118.3	-7.4	-2144.2	-7.2	-2246.4	-7.0
Indus Construct	140.8	0.6	154.0	0.6	219.6	0.8	470.4	1.6	699.7	2.4	904.4	2.9	1125.6	3.4	1308.7	3.7
Electric Power	13.7	0.1	-22.2	-0.1	41.7	0.3	117.7	0.7	194.6	1.1	229.2	1.3	301.1	1.6	333.7	1.6
Whlsle & Retail	-203.0	-0.3	-654.0	-0.8	-475.5	-0.5	-332.6	-0.4	32.4	0.0	204.1	0.2	545.1	0.5	745.7	0.7
Finance & Insr	-128.4	-0.5	-278.0	-1.1	-158.9	-0.6	-71.4	-0.3	32.4	0.1	109.8	0.4	232.5	0.8	290.1	0.9
Total	-4727.6	-0.6	-11560.9	-1.5	-8758.8	-1.1	-5019.9	-0.6	-1485.6	-0.2	1356.5	0.2	5746.9	0.6	7773.7	0.8
Japan: Employment (thousands)																
Natural Textile	-3.2	-4.4	-7.9	-11.0	-9.7	-13.2	-10.1	-13.2	-9.8	-12.1	-9.1	-10.8	-7.9	-9.4	-7.3	-8.1
Rubber Prods	-1.3	-0.8	-3.7	-2.3	-4.7	-3.0	-5.3	-3.4	-5.3	-3.4	-5.1	-3.2	-4.6	-2.9	-4.7	-2.8
Cement	-0.1	-0.5	-0.3	-1.3	-0.3	-1.2	-0.3	-0.9	-0.2	-0.6	-0.1	-0.4	-0.1	-0.3	-0.1	-0.3
Oth Nonfer Met	-1.4	-0.8	-3.4	-2.1	-3.6	-2.2	-2.8	-1.7	-2.2	-1.3	-2.0	-1.2	-1.8	-1.1	-1.7	-1.0
Metal Prods	-6.4	-0.6	-15.1	-1.5	-14.5	-1.4	-11.5	-1.1	-9.2	-0.9	-7.3	-0.7	-5.8	-0.5	-5.6	-0.5
Machinery	-21.5	-1.6	-54.3	-4.0	-64.5	-4.7	-66.1	-4.6	-62.0	-4.3	-59.1	-4.0	-55.2	-3.7	-56.0	-3.6
Elect Machinery	-40.3	-1.9	-92.7	-4.3	-102.4	-4.6	-92.8	-4.0	-81.9	-3.4	-72.7	-2.9	-64.6	-2.5	-60.9	-2.2
Motor Vehicles	-1.2	-0.1	-9.0	-1.0	-21.0	-2.3	-27.3	-3.0	-28.4	-3.0	-28.1	-3.0	-27.6	-2.9	-27.3	-2.8
Housing	-1.1	-0.1	-4.0	-0.4	-5.8	-0.6	-4.8	-0.4	-0.7	-0.1	4.8	0.4	11.5	1.0	18.1	1.5
Trucks & Buses	-4.4	-0.2	-12.1	-0.6	-8.0	-0.4	-4.3	-0.2	0.1	0.0	2.1	0.1	5.5	0.3	6.1	0.3
Total	-191.5	-0.3	-528.2	-0.9	-699.5	-1.2	-785.4	-1.3	-804.7	-1.3	-810.4	-1.3	-785.8	-1.3	-770.8	-1.2

Notes: Figures are deviations and percent deviations from the baseline solution.

Table 6A: U.S., Japan, World Macro Summary / MAXICONC: CONCERTED EXPANSION (3/6)

	1992	%df	1993	%df	1994	%df	1995	%df	1996	%df	1997	%df	1998	%df	1999	%df
UNITED STATES:																
GNP (72\$ billion)	17.6	0.9	39.2	2.0	53.3	2.6	66.4	3.2	70.3	3.3	66.1	3.0	67.7	3.0	72.7	3.1
Nominal GNP (\$b)	62.4	1.1	171.9	2.8	299.2	4.5	466.4	6.6	625.4	8.2	750.3	9.2	894.7	10.2	1054.7	11.1
CPI	1.3	0.3	4.8	1.1	10.0	2.2	17.1	3.6	24.9	5.0	32.1	6.1	44.1	7.0	44.1	7.0
Employment (mil)	0.6	0.6	1.6	1.3	2.3	2.0	3.1	2.6	3.7	3.0	3.9	3.2	4.0	3.3	4.2	3.4
Unemployment Rate (%)	-0.5	-7.2	-1.2	-16.7	-1.7	-25.5	-2.1	-33.7	-2.4	-41.0	-2.4	-39.2	-2.4	-37.2	-2.3	-37.1
3-Mo CD Rate (%)	1.5	-0.5	14.8	-36.5	1.0	-23.8	-1.0	-20.6	-1.0	-20.2	-1.0	-22.8	-1.0	-23.0	-1.0	-23.1
Fed Surplus (\$b)	-7.6	13.7	-16.1	37.4	43.5	-20.4	75.9	-48.6	96.9	-81.9	101.6	-22.8	111.4	*****	126.2	*****
Current Acct (\$b)	0.9	0.9	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.9
W.A. \$ Each Rate	6.8	0.5	17.1	1.3	27.0	2.1	37.7	2.8	45.6	3.3	48.5	3.4	52.1	3.6	57.2	3.8
Bus Cons Exp	1.9	0.8	5.3	1.0	10.2	3.4	16.7	5.9	22.5	6.3	25.0	6.9	28.4	7.9	31.0	7.7
Residential Inv	2.5	3.9	4.8	6.3	5.8	7.7	5.8	7.2	7.2	9.2	-1.6	-1.9	-1.4	-1.9	0.6	0.7
Ch Bus Invent	1.9	36.0	4.0	36.2	4.7	33.6	4.8	26.2	3.5	18.6	1.3	8.0	0.5	3.0	0.6	2.4
Net Exports G&S	-0.3	1.3	-1.3	5.4	-3.8	14.8	-7.6	28.5	-12.0	41.0	-16.4	47.1	-21.2	49.1	-26.0	95.1
Exports	0.4	0.2	0.7	0.3	0.6	0.3	0.1	0.1	-0.3	-0.1	-0.6	-0.3	-0.4	-0.2	0.2	0.1
Imports	0.7	0.3	2.0	0.9	4.3	1.8	7.7	3.1	11.7	4.5	15.7	5.8	20.8	7.3	26.2	8.6
Govt Purch G&S	4.8	1.4	9.3	2.7	9.3	2.7	9.3	2.7	9.3	2.7	9.3	2.7	9.3	2.7	9.3	2.7
JAPAN: 80Y (billion)																
GNP (1000)	3288.5	0.8	7542.7	1.9	9355.2	2.3	10997.1	2.6	13165.1	3.1	15502.1	3.5	18116.9	3.9	20849.7	4.2
Nominal GNE (Yb)	-212.7	-0.2	-1818.5	-2.8	-2382.9	-3.1	-384.3	-0.1	3318.7	-0.7	6839.4	-1.5	10323.4	-2.4	13403.3	-2.4
Pers Cons Defl	-0.1	0.0	-0.8	0.0	0.7	0.0	4.3	0.1	12.1	0.2	19.5	0.3	26.9	0.4	33.8	0.5
Employment (X10000)	0.0	-0.5	0.0	-1.4	-0.1	-2.0	-0.1	-2.3	-0.1	-2.5	-0.1	-2.6	-0.1	-2.7	-0.1	-2.6
Unemployment Rate (%)	-0.2	-3.8	-0.5	-8.3	-0.5	-7.9	-0.4	-7.1	-0.4	-6.7	-0.4	-6.7	-0.4	-6.8	-0.4	-6.9
Bank Lendg Rate (%)	-1520.4	8.3	-2661.9	13.6	-2131.0	9.9	-1825.0	7.8	-1527.9	6.0	-1151.7	4.2	-676.1	2.3	-227.9	0.7
Govt Surplus (Yb)	6.8	5.6	12.9	9.2	13.2	8.5	15.9	9.5	17.0	9.9	19.6	10.7	22.6	14.2	29.4	15.2
Current Acct (\$b)	-5.6	-4.4	-11.3	-8.9	-11.1	-8.9	-10.9	-8.9	-10.8	-8.9	-10.6	-8.9	-10.5	-8.9	-10.3	-8.9
Y/\$ Exchange Rate	728.3	0.3	1993.1	0.9	3041.9	1.4	4131.7	1.9	5265.2	2.4	6394.9	2.8	7549.2	3.2	8730.5	3.7
Consumpt-Priv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cons-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Investment	609.2	0.7	1609.9	7.0	2270.1	2.5	2807.8	3.1	3674.7	3.9	4540.7	5.3	5471.1	6.1	6319.9	8.5
Investment-Bus	505.9	2.6	1409.9	11.9	1759.1	7.3	2263.9	11.3	2920.9	17.8	3607.7	8.4	4400.7	9.2	5219.9	8.8
Investment-Priv	1750.4	6.0	3509.7	11.9	3509.7	11.9	3509.7	11.9	3509.7	11.9	3509.7	11.9	3509.7	11.9	3509.7	11.9
Invst-Government	257.0	11.4	561.3	20.5	519.6	12.9	490.8	10.0	490.8	10.0	490.8	10.0	490.8	10.0	490.8	10.0
Net Exports	-558.6	-21.0	-1510.9	-25.4	-1745.1	-23.2	-1650.9	-23.9	-1745.2	-20.7	-1583.9	-11.8	-1344.4	-8.7	-1068.4	-5.0
Exports	123.7	0.2	271.3	0.3	408.9	0.5	645.2	0.8	984.3	1.1	1491.5	1.5	2133.9	2.1	2893.3	2.6
Imports	682.4	0.9	1782.2	2.4	2154.0	2.8	2295.7	2.9	2729.5	3.3	3075.4	3.6	3478.2	4.0	3961.7	4.3
WORLD:																
Real GNP	25.0	0.4	59.0	0.8	81.0	1.1	99.4	1.3	106.8	1.4	108.3	1.3	120.4	1.4	133.6	1.5
Real Exports	1.5	0.2	4.2	0.4	7.9	0.8	11.8	1.1	15.9	1.4	20.6	1.7	27.8	2.3	36.8	2.8
Noml Exports(\$b)	15.1	0.4	38.7	0.9	63.4	1.4	97.8	2.0	134.2	2.5	173.3	3.0	220.6	3.6	282.9	4.2

Notes: Figures are deviations and percent deviations from the baseline solution in billions of 1980 yen (Japan), billions of 1972 dollars (US), and billions of 1970 dollars (World), unless indicated. denotes % change over three digits.

Table 6B: U.S., Japan, World Merchandise Trade Summary / MAXICON: CONCERTED EXPANSION (3/6)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
United States:																
Exports	1.88	0.4	4.85	1.0	7.46	1.4	11.22	1.9	16.01	2.6	21.04	3.1	26.25	3.7	34.74	4.3
Imports	5.94	1.1	14.32	2.5	24.62	3.9	41.64	6.0	61.73	8.2	82.83	10.1	109.91	12.3	138.84	14.1
Balance	-4.07		-9.48		-17.16		-30.42		-45.72		-61.78		-83.66		-104.10	
Exports to Japan	0.75	1.3	2.01	3.3	2.41	3.6	3.08	4.2	4.13	5.2	5.14	6.0	6.09	6.6	7.43	7.2
Imports from Japan	2.28	1.6	4.45	3.0	5.64	3.5	9.60	5.5	14.44	7.7	19.68	9.6	26.43	11.8	33.91	13.5
Balance	-1.53		-2.44		-3.23		-6.53		-10.32		-14.54		-20.34		-26.49	
Japan:																
Exports	3.36	0.9	6.97	1.7	9.34	2.1	15.36	3.2	22.41	4.3	29.86	5.3	36.89	6.4	49.47	7.5
Imports	2.44	1.0	6.75	2.6	8.83	3.2	11.04	3.7	14.21	4.5	17.25	5.1	20.22	5.6	24.41	6.1
Balance	0.91		0.22		0.51		4.32		8.21		12.61		16.66		25.05	
Exports to U.S.	2.28	1.6	4.42	3.0	5.59	3.4	9.61	5.5	14.43	7.6	19.67	9.6	26.32	11.7	34.09	13.6
Imports from U.S.	0.70	1.2	1.94	3.2	2.40	3.6	3.01	4.1	4.04	5.1	5.02	5.8	6.08	6.6	7.50	7.3
Balance	1.58		2.48		3.19		6.60		10.39		14.65		20.24		26.59	
Other Indust. Ctries.																
Exports	5.86	0.3	16.45	0.8	28.81	1.2	44.01	1.8	58.48	2.2	74.93	2.6	97.59	3.1	123.93	3.6
Imports	3.79	0.2	12.00	0.5	21.30	0.9	31.06	1.2	37.98	1.4	46.87	1.5	63.12	1.9	79.92	2.2
Balance	2.07		4.45		7.51		12.95		20.50		28.06		34.47		44.01	
EC																
Exports	3.63	0.2	10.51	0.7	18.42	1.1	27.51	1.5	35.20	1.8	44.40	2.0	58.26	2.5	73.97	2.9
Imports	2.68	0.2	9.23	0.6	16.44	0.9	22.98	1.2	26.34	1.2	31.43	1.4	43.28	1.8	54.09	2.0
Balance	0.95		1.28		1.98		4.53		8.86		12.98		14.98		19.88	
Developing Countries																
Exports	3.69	0.4	9.38	1.1	16.14	1.7	24.75	2.4	34.19	3.1	43.73	3.7	55.85	4.5	70.55	5.2
Imports	2.60	0.3	6.15	0.7	9.49	1.0	15.33	1.6	22.11	2.1	28.89	2.6	31.67	2.8	44.22	3.5
Balance	1.08		3.23		6.66		9.41		12.08		14.84		24.19		26.34	
Asian NIEs																
Exports	1.00	0.3	2.77	0.8	4.93	1.4	8.13	2.2	11.98	3.0	16.13	3.8	21.15	4.8	26.88	5.7
Imports	1.05	0.4	2.60	0.9	4.09	1.3	6.50	1.9	9.52	2.7	12.75	3.3	11.79	3.6	19.84	5.1
Balance	-0.06		0.18		0.84		1.63		2.46		3.38		9.35		7.03	
C.P.E. excl. China																
Exports	1.00	0.3	2.77	0.8	4.93	1.4	8.13	2.2	11.98	3.0	16.13	3.8	21.15	4.8	26.88	5.7
Imports	1.05	0.4	2.60	0.9	4.09	1.3	6.50	1.9	9.52	2.7	12.75	3.3	11.79	3.6	19.84	5.1
Balance	-0.06		0.18		0.84		1.63		2.46		3.38		9.35		7.03	
World:																
Exports	15.15	0.4	38.66	0.9	63.42	1.4	97.76	2.0	134.16	2.5	173.28	3.0	220.55	3.6	282.94	4.2
Real Export (70\$b)	1.47	0.2	4.24	0.4	7.87	0.8	11.81	1.1	15.86	1.4	20.59	1.7	27.75	2.3	36.75	2.8

NOTES: Figures are deviations and percent deviations from the baseline solution in billions of current dollars.

Table 6C: Real World Gross National Product (Bill. 1970 U.S. \$) / MAXICONC: CONCERTED EXPANSION (3/6)

	1992	%chg	1993	%chg	1994	%chg	1995	%chg	1996	%chg	1997	%chg	1998	%chg	1999	%chg
U.S.	15.91	0.9	35.44	2.0	48.11	2.6	59.95	3.2	63.53	3.3	59.71	3.0	61.11	3.0	65.70	3.1
Japan	4.39	0.9	10.07	1.9	12.50	2.3	14.69	2.6	17.58	3.1	20.71	3.5	24.20	3.9	27.85	4.2
Other Indust. Countries	3.63	0.2	10.86	0.5	16.54	0.7	19.61	0.8	19.93	0.8	20.73	0.8	25.07	0.9	27.82	1.0
Canada	0.18	0.1	0.44	0.2	0.91	0.4	1.73	0.8	2.47	1.1	3.21	1.4	4.14	1.7	5.42	2.2
Australia, N.Z.	0.08	0.1	0.20	0.2	0.28	0.3	0.39	0.5	0.51	0.6	0.62	0.7	0.73	0.8	0.90	1.0
EC	3.29	0.2	9.95	0.5	14.83	0.8	16.70	0.9	16.20	0.8	15.92	0.8	18.94	0.9	19.83	1.0
Rest of Industrialized	0.08	0.0	0.27	0.1	0.52	0.2	0.79	0.3	0.75	0.3	0.97	0.3	1.27	0.4	1.67	0.5
Developing Countries	1.04	0.1	2.61	0.2	3.81	0.3	5.14	0.4	6.56	0.4	8.01	0.5	10.80	0.6	13.04	0.7
OPEC	0.13	0.1	0.37	0.3	0.52	0.4	0.66	0.5	0.78	0.6	0.84	0.6	0.98	0.7	1.15	0.8
Africa	0.04	0.1	0.11	0.2	0.17	0.3	0.23	0.4	0.27	0.4	0.29	0.4	0.38	0.6	0.41	0.6
Asia incl China	0.30	0.0	0.91	0.1	1.49	0.2	2.04	0.2	2.70	0.3	3.47	0.4	5.20	0.5	6.20	0.6
Asian NIEs	0.05	0.0	0.22	0.2	0.47	0.4	0.77	0.6	1.14	0.9	1.48	1.1	2.59	1.5	2.69	1.9
Middle East non-oil	0.02	0.0	0.09	0.2	0.15	0.2	0.21	0.3	0.27	0.4	0.32	0.5	0.39	0.6	0.47	0.6
Western Hemisphere	0.54	0.2	1.13	0.4	1.48	0.4	2.00	0.6	2.55	0.7	3.08	0.8	3.85	1.0	4.80	1.2
C.P.E. excl China	-0.01	0.0	0.01	0.0	0.04	0.0	0.05	0.0	-0.82	-0.1	-0.83	-0.1	-0.81	-0.1	-0.76	-0.1
World Total	24.97	0.4	59.00	0.8	81.00	1.1	99.44	1.3	106.78	1.4	108.31	1.3	120.37	1.4	133.64	1.5

NOTES: Figures are deviations and percent deviations from the baseline solution in billions of 1970 dollars.

Table 6D: U.S., Japan Industry Detail, Selected Industries / MAXICONC: CONCERTED EXPANSION (3/6)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif		
	United States: Gross Output						(72\$ million)						United States: Gross Output					
Mining, Metl	129.4	3.3	268.3	6.0	310.9	6.2	300.9	5.5	194.1	3.3	21.5	0.4	-105.8	-1.7	-219.4	-3.2		
Textiles	558.9	1.4	1193.4	2.9	1592.9	3.8	1969.3	4.5	1995.0	4.5	1759.8	3.9	1790.1	3.8	1991.0	4.0		
Rubber, Plast	471.9	1.3	1042.7	2.8	1402.0	3.7	1756.8	4.4	1866.3	4.5	1747.7	4.2	1768.6	4.1	1878.6	4.1		
Iron & Steel	826.0	3.8	1739.5	7.2	2186.0	8.4	2475.5	9.0	2217.1	7.8	1510.5	5.5	1128.4	4.0	992.3	3.3		
Fabr Metal	1190.7	1.8	2561.3	3.6	3303.1	4.4	3829.0	5.0	3507.1	4.4	2484.7	3.1	2065.8	2.5	1965.8	2.2		
Nonelect Machin	1849.2	1.3	4155.5	2.7	5731.2	3.4	7366.1	4.1	8138.5	4.3	8078.9	4.0	8390.8	3.9	8820.4	3.7		
Elect Machin	2442.6	2.4	5343.2	5.1	6807.0	6.4	8076.8	7.5	8316.4	7.7	7668.4	7.3	7492.0	7.1	7592.1	6.9		
Automobiles	2771.4	3.0	6743.9	6.8	9849.4	9.2	12814.3	11.3	14510.5	12.2	13240.8	11.1	12668.1	10.4	12939.2	10.0		
Aircraft	1054.2	5.2	2115.0	9.7	2322.3	10.3	2415.6	10.7	2187.7	9.7	1768.9	8.3	1578.8	7.2	1525.7	6.4		
Util, Elec	332.7	0.6	832.0	1.6	1298.3	2.4	1806.9	3.3	2187.0	3.8	2408.6	4.2	2674.8	4.5	2980.9	4.9		
Wholesale, Retl	3662.1	0.8	8611.6	1.8	12822.2	2.5	17168.2	3.3	19578.6	3.7	19891.1	3.6	21239.7	3.8	23348.4	4.0		
Manuf. Tot.	18774.0	1.7	41375.0	3.5	54757.0	4.4	66392.0	5.2	67756.0	5.2	59080.0	4.5	56311.0	4.1	57853.0	4.0		
	United States: Employment						(thousands)						United States: Employment					
Dur, Elec & El	26.4	1.3	67.9	3.3	100.1	4.9	124.2	6.2	133.2	6.8	126.4	6.8	117.2	6.5	110.6	6.1		
Dur, Mach excl E	27.9	1.2	78.7	3.3	131.6	5.3	184.5	7.2	224.0	8.5	241.3	9.2	252.3	9.4	264.4	9.3		
Dur, Motor Vehic	11.9	1.5	32.5	4.1	53.4	6.5	72.7	8.4	85.9	9.5	84.3	9.1	77.5	8.2	72.5	7.3		
Dur, Fab Metal	19.2	1.4	50.0	3.6	75.9	5.3	93.2	6.4	91.2	6.2	66.3	4.6	38.7	2.7	14.4	1.0		
Dur, Pri Metal	15.0	1.3	41.3	3.8	67.2	6.2	88.4	8.0	97.3	8.8	88.4	8.1	72.1	6.7	56.1	5.1		
Nondur, Rubber &	5.7	0.6	15.8	1.8	25.9	2.9	35.2	3.9	41.0	4.5	41.9	4.6	41.1	4.5	40.9	4.4		
Transp	15.4	0.5	41.9	1.4	66.4	2.2	86.2	2.9	93.8	3.1	86.5	2.9	74.0	2.5	60.7	2.0		
Services	46.3	0.2	148.2	0.6	282.8	1.1	445.0	1.7	609.5	2.3	754.1	2.8	887.7	3.3	1017.2	3.7		
Wholesale & Retail	91.2	0.4	270.1	1.0	485.0	1.9	723.8	2.7	930.9	3.4	1065.1	3.8	1173.1	4.2	1281.5	4.4		
All Priv Sec	381.5	0.4	1076.0	1.2	1823.1	2.0	2571.5	2.8	3108.8	3.3	3317.7	3.6	3452.8	3.7	3633.3	3.9		
	Japan: Gross Output						(80Y million)						Japan: Gross Output					
Rubber Products	-5.4	-0.2	9.2	0.4	78.2	2.9	93.1	3.5	115.7	4.0	138.5	4.8	170.2	5.9	200.2	5.8		
Petroleum Prods	20.5	0.1	317.7	2.0	652.0	3.9	693.3	4.1	812.8	4.5	940.0	5.1	1076.1	5.6	1248.3	6.1		
Roll, Cast, Forge	299.7	1.7	967.3	5.3	1422.0	7.4	1534.2	7.8	1652.1	8.2	1750.8	8.6	1782.1	8.8	1908.4	9.0		
Oth Nonferrous	22.2	0.4	41.9	0.7	29.3	0.4	38.7	0.6	96.8	1.3	166.8	2.2	238.7	3.1	319.0	3.8		
Metal Products	130.7	0.9	334.2	2.2	480.5	3.0	600.7	3.5	795.1	4.4	999.9	5.3	1197.3	6.1	1405.2	6.5		
Machinery	-137.9	-0.4	-335.3	-0.9	-174.4	-0.5	88.0	0.2	421.7	1.0	777.2	1.8	1264.1	2.7	1618.6	3.1		
Electr Machinery	516.4	1.1	1284.8	2.4	1664.1	2.9	2070.0	3.2	2699.1	3.8	3403.6	4.4	4214.9	5.0	5184.4	5.3		
Automobiles	-53.2	-0.2	-176.8	-0.7	-137.6	-0.5	77.0	0.3	314.9	1.1	530.2	1.8	728.1	2.5	957.9	3.0		
Indus Construct	348.3	1.4	777.7	2.9	923.4	3.4	1056.8	3.7	1243.5	4.2	1447.2	4.7	1657.3	5.0	1899.0	5.3		
Electric Power	157.5	1.0	326.2	2.1	385.8	2.3	454.0	2.7	540.3	3.1	599.1	3.3	682.5	3.6	786.6	3.8		
Finance & Retail	425.6	0.6	834.9	1.0	1098.4	1.3	1343.9	1.5	1773.8	2.0	2076.3	2.1	2459.7	2.3	2800.3	2.5		
Finance & Insr	128.7	0.5	317.9	1.2	464.5	1.7	573.0	2.1	726.0	2.5	853.2	2.9	1008.4	3.3	1149.9	3.6		
Total	5408.5	0.7	12791.8	1.7	17062.9	2.2	20535.3	2.5	25411.8	3.0	29760.5	3.4	35158.0	3.8	40566.7	4.1		
	Japan: Employment						(thousands)						Japan: Employment					
Natural Textile	-0.3	-0.4	-0.8	-1.1	-0.4	-0.5	0.6	0.7	1.9	2.3	3.0	3.6	4.2	5.0	5.3	5.9		
Rubber Prods	-0.5	-0.3	-1.4	-0.9	-1.7	-1.1	-1.8	-1.1	-1.5	-0.9	-0.9	-0.5	-0.1	-0.1	0.3	0.2		
Cement	-0.1	-0.3	-0.2	-0.7	-0.2	-0.6	-0.1	-0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1		
Oth Nonfer Met	-0.8	-0.5	-1.7	-1.0	-1.5	-0.9	-1.2	-0.7	-1.0	-0.6	-0.9	-0.5	-0.7	-0.4	-0.6	-0.3		
Metal Prods	-2.9	-0.3	-6.6	-0.7	-5.3	-0.5	-2.8	-0.3	0.0	0.0	2.1	0.2	3.7	0.3	4.5	0.4		
Machinery	-10.1	-0.7	-27.0	-2.0	-32.8	-2.4	-30.3	-2.2	-25.6	-1.8	-20.8	-1.4	-15.2	-1.0	-13.2	-0.8		
Electr Machinery	-3.4	-0.2	-11.5	-0.5	-17.3	-0.8	-13.0	-0.7	-8.3	-0.3	-1.7	-0.1	3.5	0.1	6.4	0.2		
Motor Vehicles	-1.5	-0.2	-3.4	-0.4	-3.9	-0.4	-3.0	-0.3	-1.1	-0.1	1.1	0.1	3.4	0.4	5.5	0.6		
Housing	3.4	0.3	11.3	1.1	19.8	1.9	26.8	2.5	34.4	3.2	42.4	3.8	50.9	4.5	59.5	5.1		
Trucks & Buses	-2.7	0.1	7.0	0.4	12.1	0.6	15.2	0.8	19.8	1.0	22.4	1.1	25.9	1.2	28.7	1.3		
Total	-0.6	0.0	-7.7	0.0	6.5	0.0	42.0	0.1	119.1	0.2	191.6	0.3	265.4	0.4	333.2	0.5		

Notes: Figures are deviations and percent deviations from the baseline solution.

Table 7A: U.S., Japan, World Macro Summary / MAXIODA: JAPAN OVERSEAS DEV ASSTNCT (3/6)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
UNITED STATES:																
GNP (72\$ billion)	0.4	0.0	0.5	0.0	0.4	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.0
Nominal GNP (\$b)	1.2	0.0	1.8	0.0	2.3	0.0	2.3	0.0	2.1	0.0	2.1	0.0	2.1	0.0	1.4	0.0
CPI	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0
Employment (mil)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unemploy Rate (%)	0.0	-0.1	0.0	-0.2	0.0	-0.2	0.0	-0.2	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.0	0.0
3-Mo CD Rate (%)	0.0	0.4	0.0	0.8	0.0	0.7	0.0	0.6	0.0	0.5	0.0	0.5	0.0	0.4	0.0	0.2
Fed Surplus (\$b)	0.4	-0.1	0.5	-0.2	0.5	-0.2	0.3	-0.2	0.2	-0.1	0.2	-0.1	0.2	-0.3	0.1	-0.2
Current Acct (\$b)	0.6	-1.1	0.8	-1.8	1.0	-2.5	1.0	-2.8	1.0	-3.9	1.0	-4.2	0.8	-2.0	1.1	-3.0
W.A. \$ Exch Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pers Cons Exp	0.1	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Bus Fixed Invest	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	-0.2	0.0	-0.2	-0.1	-0.3	-0.1
Residential Invs	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	0.0	0.0
Ch Bus Invest	0.0	0.7	0.0	0.4	0.0	0.1	0.0	-0.1	0.0	-0.2	0.0	-0.2	0.0	-0.1	0.0	-0.1
Net Export G&S	0.2	-0.7	0.2	-0.8	0.3	-1.0	0.3	-1.0	0.2	-0.8	0.2	-0.7	0.2	-0.4	0.2	-0.5
Exports	0.2	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.2	0.1	0.2	0.1
Imports	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Govt Purch G&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAPAN:																
GNE (80Y billion)	112.7	0.0	113.4	0.0	191.4	0.0	202.1	0.0	218.4	0.1	213.1	0.0	150.5	0.0	163.8	0.0
Nominal GNE (Yb)	100.8	0.0	137.9	0.0	221.3	0.0	266.4	0.1	299.9	0.1	321.5	0.1	286.6	0.0	291.2	0.0
Pers Cons Defl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employment (X100000)	0.3	0.0	0.4	0.0	0.6	0.0	0.8	0.0	0.9	0.0	1.0	0.0	0.9	0.0	0.9	0.0
Unemploy Rate (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bank Lendg Rate(%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Govt Surplus (Yb)	-3187.7	17.5	-3229.1	16.5	-3267.5	15.2	-3310.7	14.1	-3357.2	13.1	-3406.4	12.4	-3463.5	11.6	-3516.8	11.6
Current Acct (\$b)	-24.6	-20.4	-25.4	-18.1	-26.0	-16.7	-26.8	-15.9	-27.6	-16.1	-28.5	-15.6	-29.4	-18.5	-30.2	-15.6
Y/\$ Exchange Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Consumptn-Privt	16.7	0.0	30.1	0.0	47.7	0.0	61.5	0.0	72.3	0.0	78.9	0.0	75.6	0.0	73.3	0.0
Cons-Nonprofit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cons-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Investment-Busn	24.6	0.0	38.8	0.0	54.8	0.1	60.4	0.1	63.0	0.1	60.4	0.1	43.4	0.0	38.9	0.0
Invas-Residentl	11.8	0.1	20.3	0.1	23.4	0.1	25.0	0.1	22.3	0.1	18.6	0.1	9.8	0.0	4.2	0.0
Invas-Governmnt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory-Privt	17.3	0.8	12.4	0.5	14.4	0.4	9.6	0.3	6.3	0.1	3.1	0.1	-6.3	-0.1	0.9	0.0
Invt-Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Exports	47.9	1.8	24.4	0.4	51.2	0.7	44.5	0.6	54.5	0.6	52.1	0.4	30.3	0.2	53.6	0.3
Exports	63.8	0.1	54.1	0.1	88.4	0.1	86.7	0.1	95.9	0.1	94.0	0.1	70.8	0.1	90.1	0.1
Imports	15.9	0.0	29.7	0.0	37.2	0.0	42.2	0.1	41.4	0.1	41.9	0.0	40.5	0.0	36.6	0.0
WORLD:																
Real GNP	11.1	0.2	16.1	0.2	21.4	0.3	26.2	0.3	32.4	0.4	37.8	0.5	42.8	0.5	47.4	0.5
Real Exports	1.5	0.2	2.2	0.2	2.7	0.3	2.6	0.2	2.6	0.2	2.5	0.2	2.1	0.2	2.3	0.2
Noml Exports(\$b)	5.9	0.2	8.7	0.2	11.1	0.2	11.7	0.2	11.8	0.2	12.1	0.2	10.2	0.2	11.4	0.2

Notes: Figures are deviations and percent deviations from the baseline solution in billions of 1980 yen (Japan), billions of 1972 dollars (US), and billions of 1970 dollars (World), unless indicated.

Table 7B: U.S., Japan, World Merchandise Trade Summary / MAXIODA: JAPAN OVERSEAS DEV ASST (3/6)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
United States:																
Exports	0.83	0.2	1.08	0.2	1.38	0.3	1.41	0.2	1.35	0.2	1.31	0.2	1.04	0.1	1.26	0.2
Imports	0.15	0.0	0.19	0.0	0.28	0.0	0.32	0.0	0.31	0.0	0.30	0.0	0.12	0.0	0.22	0.0
Balance	0.68		0.89		1.10		1.08		1.04		1.02		0.92		1.04	
Exports to Japan	0.03	0.1	0.03	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.06	0.1	0.06	0.1	0.05	0.0
Imports from Japan	0.03	0.0	0.04	0.0	0.05	0.0	0.05	0.0	0.05	0.0	0.04	0.0	0.01	0.0	0.00	0.0
Balance	0.00		-0.01		-0.01		0.00		0.01		0.02		0.05		0.05	
Japan:																
Exports	0.65	0.2	0.75	0.2	1.08	0.2	1.07	0.2	1.08	0.2	1.04	0.2	0.76	0.1	0.94	0.1
Imports	0.12	0.0	0.13	0.1	0.18	0.1	0.22	0.1	0.24	0.1	0.24	0.1	0.15	0.0	0.22	0.1
Balance	0.53		0.62		0.89		0.85		0.84		0.80		0.61		0.72	
Exports to U.S.	0.04	0.0	0.05	0.0	0.05	0.0	0.05	0.0	0.05	0.0	0.04	0.0	-0.07	0.0	0.00	0.0
Imports from U.S.	0.03	0.0	0.03	0.1	0.05	0.1	0.05	0.1	0.06	0.1	0.06	0.1	0.04	0.0	0.05	0.0
Balance	0.01		0.01		0.01		0.00		-0.01		-0.02		-0.11		-0.05	
Other Indust. Ctries.																
Exports	2.12	0.1	3.14	0.1	4.05	0.2	4.23	0.2	4.19	0.2	4.20	0.1	3.23	0.1	4.27	0.1
Imports	0.55	0.0	0.93	0.0	1.48	0.1	1.87	0.1	2.05	0.1	2.24	0.1	2.01	0.1	2.61	0.1
Balance	1.57		2.21		2.57		2.36		2.15		1.97		1.22		1.65	
EC																
Exports	1.27	0.1	1.88	0.1	2.52	0.1	2.70	0.1	2.73	0.1	2.76	0.1	2.08	0.1	2.84	0.1
Imports	0.37	0.0	0.68	0.0	1.04	0.1	1.29	0.1	1.42	0.1	1.51	0.1	1.26	0.1	1.63	0.1
Balance	0.90		1.20		1.48		1.41		1.31		1.25		0.83		1.21	
Developing Countries																
Exports	2.01	0.2	3.13	0.4	3.66	0.4	3.63	0.4	3.45	0.3	3.35	0.3	3.21	0.3	3.16	0.2
Imports	4.52	0.6	6.72	0.8	7.90	0.9	7.35	0.8	6.65	0.6	6.00	0.5	5.16	0.5	4.73	0.4
Balance	-2.51		-3.59		-4.24		-3.72		-3.20		-2.65		-1.95		-1.58	
Asian NIEs																
Exports	0.38	0.1	0.60	0.2	0.78	0.2	0.78	0.2	0.75	0.2	0.71	0.2	0.67	0.2	0.61	0.1
Imports	0.20	0.1	0.35	0.1	0.52	0.2	0.60	0.2	0.64	0.2	0.65	0.2	0.60	0.2	0.65	0.2
Balance	0.18		0.25		0.25		0.18		0.11		0.06		0.07		-0.04	
C.P.E. excl. China																
Exports	0.38	0.1	0.60	0.2	0.78	0.2	0.78	0.2	0.75	0.2	0.71	0.2	0.67	0.2	0.61	0.1
Imports	0.20	0.1	0.35	0.1	0.52	0.2	0.60	0.2	0.64	0.2	0.65	0.2	0.60	0.2	0.65	0.2
Balance	0.18		0.25		0.25		0.18		0.11		0.06		0.07		-0.04	
World:																
Exports	5.93	0.2	8.74	0.2	11.15	0.2	11.71	0.2	11.83	0.2	12.09	0.2	10.25	0.2	11.41	0.2
Real Export (70\$b)	1.53	0.2	2.23	0.2	2.68	0.3	2.65	0.2	2.55	0.2	2.50	0.2	2.06	0.2	2.29	0.2

NOTES: Figures are deviations and percent deviations from the baseline solution in billions of current dollars.

Table 7C: Real World Gross National Product (Bill. 1970 U.S. \$) / MAXIODA: JAPAN OVERSEAS DEV ASST (3/6)

	1992	%chg	1993	%chg	1994	%chg	1995	%chg	1996	%chg	1997	%chg	1998	%chg	1999	%chg
U.S.	0.34	0.0	0.41	0.0	0.38	0.0	0.21	0.0	0.07	0.0	0.03	0.0	0.05	0.0	-0.10	0.0
Japan	0.15	0.0	0.15	0.0	0.26	0.0	0.27	0.0	0.29	0.1	0.28	0.0	0.20	0.0	0.22	0.0
Other Indust. Countries	0.53	0.0	0.94	0.0	1.19	0.0	1.18	0.0	0.99	0.0	0.91	0.0	0.66	0.0	0.87	0.0
Canada	0.08	0.0	0.16	0.1	0.18	0.1	0.13	0.1	0.04	0.0	0.02	0.0	-0.03	0.0	-0.02	0.0
Australia, N.Z.	0.09	0.1	0.14	0.2	0.15	0.2	0.13	0.2	0.10	0.1	0.08	0.1	0.06	0.1	0.06	0.1
EC	0.33	0.0	0.58	0.0	0.77	0.0	0.80	0.0	0.73	0.0	0.67	0.0	0.46	0.0	0.63	0.0
Rest of Industrialized	0.03	0.0	0.06	0.0	0.09	0.0	0.12	0.0	0.12	0.0	0.15	0.1	0.17	0.1	0.21	0.1
Developing Countries	5.93	0.5	6.40	0.5	7.16	0.5	7.87	0.5	8.86	0.6	9.63	0.6	10.06	0.6	9.78	0.6
OPEC	0.73	0.6	0.42	0.4	0.61	0.5	0.52	0.4	0.57	0.4	0.55	0.4	0.56	0.4	0.55	0.4
Africa	0.06	0.1	0.10	0.2	0.10	0.2	0.08	0.1	0.06	0.1	0.04	0.1	0.03	0.1	0.03	0.0
Asia incl China	4.86	0.7	5.31	0.7	5.77	0.7	6.60	0.8	7.61	0.8	8.50	0.9	8.97	0.9	8.75	0.8
Asian NIEs	0.04	0.0	0.07	0.1	0.09	0.1	0.08	0.1	0.07	0.1	0.06	0.0	0.10	0.1	0.05	0.0
Middle East non-oil	0.00	0.0	0.00	0.0	0.00	0.0	0.01	0.0	0.01	0.0	0.01	0.0	0.01	0.0	0.01	0.0
Western Hemisphere	0.27	0.1	0.56	0.2	0.67	0.2	0.67	0.2	0.61	0.2	0.53	0.1	0.48	0.1	0.45	0.1
C.P.E. excl China	4.14	0.3	8.16	0.7	12.45	1.0	16.65	1.3	22.16	1.7	26.94	2.0	31.77	2.3	36.63	2.6
World Total	11.10	0.2	16.06	0.2	21.44	0.3	26.18	0.3	32.38	0.4	37.80	0.5	42.74	0.5	47.41	0.5

NOTES: Figures are deviations and percent deviations from the baseline solution in billions of 1970 dollars.

Table 7D: U.S., Japan Industry Detail, Selected Industries / MAXIODA: JAPAN OVERSEAS DEV ASST (3/6)

	1992	%dif	1993	%dif	1994	%dif	1995	%dif	1996	%dif	1997	%dif	1998	%dif	1999	%dif
United States: Gross Output (72\$ million)																
Mining, Metl	12.5	0.3	19.4	0.4	20.0	0.4	15.7	0.3	9.9	0.2	6.4	0.1	3.2	0.1	1.7	0.0
Textiles	12.1	0.0	14.4	0.0	11.4	0.0	6.8	0.0	2.9	0.0	4.3	0.0	9.4	0.0	3.7	0.0
Rubber,Plast	10.0	0.0	11.7	0.0	11.2	0.0	6.8	0.0	2.5	0.0	1.2	0.0	1.4	0.0	-2.7	0.0
Iron & Steel	16.8	0.1	17.4	0.1	13.9	0.1	3.2	0.0	-4.9	0.0	-6.4	0.0	-3.3	0.0	-11.6	0.0
Fabr Metal	23.1	0.0	21.3	0.0	13.4	0.0	-4.1	0.0	-14.8	0.0	-15.9	0.0	-13.7	0.0	-27.1	0.0
Nonel machin	49.5	0.0	47.6	0.0	53.0	0.0	30.7	0.0	9.1	0.0	-5.0	0.0	-23.9	0.0	-34.4	0.0
Elect Machin	35.1	0.0	35.3	0.0	37.0	0.0	20.5	0.0	6.9	0.0	1.3	0.0	-6.4	0.0	-14.3	0.0
Automobiles	53.3	0.1	67.2	0.1	57.8	0.1	18.4	0.0	-10.8	0.0	-21.9	0.0	-17.6	0.0	-54.9	0.0
Aircraft	13.8	0.1	13.5	0.1	13.1	0.1	6.5	0.0	1.1	0.0	-0.4	0.0	-1.1	0.0	-1.2	0.0
Util, Elec	7.1	0.0	10.8	0.0	12.4	0.0	10.2	0.0	14.4	0.0	5.5	0.0	5.1	0.0	1.6	0.0
Whlsale, Retl	77.1	0.0	104.5	0.0	101.8	0.0	57.4	0.0	14.4	0.0	-6.6	0.0	1.7	0.0	-46.6	0.0
Manuf. Tot.	403.0	0.0	454.0	0.0	413.0	0.0	199.0	0.0	33.0	0.0	-11.0	0.0	4.0	0.0	-148.0	0.0
United States: Employment (thousands)																
Dur, Elec & El	0.4	0.0	0.5	0.0	0.6	0.0	0.5	0.0	0.2	0.0	0.1	0.0	-0.1	0.0	-0.2	0.0
Dur, Mach excl E	0.7	0.0	1.2	0.0	1.4	0.1	1.3	0.1	0.9	0.0	0.5	0.0	0.1	0.0	-0.3	0.0
Dur, Motor Vehic	0.2	0.0	0.4	0.0	0.4	0.0	0.3	0.0	0.1	0.0	-0.1	0.0	-0.1	0.0	-0.2	0.0
Dur, Fab Metal	0.4	0.0	0.6	0.0	0.6	0.0	0.4	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.2	0.0
Dur, Pri Metal	0.3	0.0	0.5	0.0	0.6	0.1	0.5	0.0	0.3	0.0	0.1	0.0	0.0	0.0	-0.1	0.0
Nondur, Rubber &	0.1	0.0	0.2	0.0	0.3	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Transp	0.5	0.0	0.9	0.0	1.2	0.0	1.3	0.0	1.2	0.0	1.2	0.0	1.3	0.0	1.3	0.0
Services	0.9	0.0	2.1	0.0	3.2	0.0	3.9	0.0	4.2	0.0	4.2	0.0	4.2	0.0	3.8	0.0
Whlsale & Retail	1.9	0.0	3.9	0.0	5.2	0.0	5.1	0.0	4.0	0.0	2.9	0.0	2.5	0.0	1.1	0.0
All Priv Sec	7.6	0.0	13.6	0.0	16.6	0.0	14.8	0.0	10.9	0.0	8.1	0.0	7.9	0.0	4.8	0.0
Japan: Gross Output (80Y million)																
Rubber Products	3.6	0.2	2.0	0.1	5.3	0.2	3.1	0.1	4.5	0.2	2.9	0.1	3.2	0.1	2.3	0.1
Petroleum Prods	7.2	0.0	2.3	0.0	5.2	0.0	6.0	0.0	7.5	0.0	8.1	0.0	5.2	0.0	11.6	0.1
Roll,Cast,Forge	11.1	0.1	12.5	0.1	17.5	0.1	16.0	0.1	16.0	0.1	15.8	0.1	11.1	0.1	13.7	0.1
Oth Nonferrous	3.6	0.1	5.9	0.1	6.7	0.1	7.2	0.1	6.6	0.1	5.9	0.1	3.7	0.0	3.1	0.0
Metal Products	7.6	0.1	8.4	0.1	12.7	0.1	13.7	0.1	14.5	0.1	14.0	0.1	10.2	0.1	11.4	0.1
Machinery	23.8	0.1	22.8	0.1	37.2	0.1	37.0	0.1	40.9	0.1	39.6	0.1	26.7	0.1	34.5	0.1
Electr Machinery	23.6	0.0	26.2	0.0	41.0	0.1	44.6	0.1	47.9	0.1	47.5	0.1	32.8	0.0	39.8	0.0
Automobiles	12.0	0.1	14.0	0.1	20.4	0.1	20.6	0.1	20.9	0.1	19.4	0.1	13.6	0.0	15.8	0.0
Indus Construct	5.4	0.0	8.6	0.0	12.3	0.0	13.6	0.0	14.4	0.0	13.9	0.0	10.4	0.0	9.4	0.0
Electric Power	4.5	0.0	5.0	0.0	7.2	0.0	7.5	0.0	7.7	0.0	7.7	0.0	5.3	0.0	6.4	0.0
Whlsale & Retail	9.9	0.0	12.9	0.0	19.3	0.0	23.1	0.0	25.1	0.0	25.9	0.0	20.8	0.0	21.9	0.0
Finance & Insr	5.6	0.0	6.3	0.0	9.3	0.0	10.0	0.0	10.9	0.0	10.9	0.0	8.6	0.0	9.6	0.0
Total	232.4	0.0	257.8	0.0	386.6	0.0	404.5	0.0	429.6	0.1	422.9	0.0	308.5	0.0	348.7	0.0
Japan: Employment (thousands)																
Natural Textile	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Rubber Prods	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oth Nonferr Met	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Metal Prods	0.1	0.0	0.1	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.1	0.0
Machinery	0.3	0.0	0.4	0.0	0.6	0.0	0.6	0.0	0.7	0.0	0.6	0.0	0.5	0.0	0.5	0.0
Elec Machinery	0.4	0.0	0.4	0.0	0.6	0.0	0.7	0.0	0.6	0.0	0.6	0.0	0.4	0.0	0.4	0.0
Motor Vehicles	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.2	0.0	0.3	0.0	0.2	0.0	0.2	0.0
Housing	0.1	0.0	0.3	0.0	0.5	0.0	0.6	0.1	0.7	0.1	0.8	0.1	0.8	0.1	0.7	0.1
Trucks & Buses	0.2	0.0	0.2	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.2	0.0
Total	2.4	0.0	4.0	0.0	6.1	0.0	7.7	0.0	8.8	0.0	9.6	0.0	9.1	0.0	9.3	0.0

Notes: Figures are deviations and percent deviations from the baseline solution.

Appendix

Table A: General Import Adjustments(1980 bil.yen)¹

		1992	1993-1999
General Crops	MM01	200.0	400.0
Meat & Dairy	MM13	250.0	500.0
Grain Products	MM14	200.0	400.0
Manufd Sea Fd	MM15	190.8	381.5
Other Foods	MM16	145.3	290.5
Beverages	MM17	83.3	166.5
Tabacco	MM18	19.3	38.5
Other Textiles	MM21	89.9	179.8
Wearing Apparl	MM22	111.6	223.1
Furniture	MM24	13.0	25.9
Leather Prodcnts	MM27	13.9	27.8
Final chemicals	MM30	220.7	441.4
Iron Products	MM35	26.1	52.2
Roll,Cast,Forge	MM36	81.4	162.8
Machinery	MM40	138.8	277.5
Electr Machinry	MM41	357.4	714.8
Automobiles	MM42	57.6	115.1
Aircraft	MM43	33.1	66.2
Other Tranport	MM44	74.4	148.7
Instruments	MM45	59.8	119.7
Misc Manufactr	MM46	134.2	268.3
Whlsle & Retail	MM54	126.2	252.4
Oth Personl Sv	MM63	141.8	283.6
Total		2768.6	5536.1
		(\$16.0 b.)	(\$32.0 b.)

Table B: Adjustments of Imports from US(1980 bil.yen)²

		1992	1993-1999
Electr Machinry	MUSA41	1030.0	2060.1
Automobiles	MUSA42	500.0	1000.0
Aircraft	MUSA43	200.0	400.0
Total		1730.0	3460.1
		(\$10.0 b.)	(\$20.0 b.)

Note:¹ General import adjustments for 1993-1990 are taken from Shishido and Nakamura(1992)[5]. Namely, constant-term adjustments of import functions were introduced:5% for agricultural food production, 10% for processed food production, and 35% for manufacturing imports in 1991.

² Based on a tentative assumption that Japan's electrical machinery and automobiles productions are replaced by 3% and 4% respectively by the imports from the United States. Additional aircraft imports are assumed exogenously.

References

- [1] Adams, F. Gerard and Shuntaro Shishido(1987), *Structure of Trade and Industry in the U.S.-Japan Economy*, NIRA Output, NRS-85-1. Tokyo: National Institute for Research Advancement, February, 1987.
- [2] Adams, F. Gerard, Byron Gangnes, and Shuntaro Shishido(1990), *Structure of Trade and Industry in the U.S.-Japan Economy; Phase II. Integration with Project LINK and Simulation Application*, NIRA Research Output 3, no.1, Tokyo: National Institute for Research Advancement.
- [3] Adams, F. Gerard, Byron Gangnes, and Shuntaro Shishido(1992), "Macro and Industry Implications of Voluntary Export Restraints on US-Japan Trade," Report to the National Institute for Research Advancement, June, 1992.
- [4] Adams, F. Gerard, Byron Gangnes, and Shuntaro Shishido(1993), *Economic Activity, Trade, and Industry in the U.S.-Japan-World Economy : A Macro Model Study of Economic Interactions*, New York: Praeger Publishers.
- [5] Shishido, Shuntaro and Osamu Nakamura(1992), "Induced Technical Progress and Structural Adjustment: A Multi-Sectoral Model Approach to Japan's Growth Alternatives", *Journal of Applied Input-Output Analysis*, Vol.1, No.1.
- [6] Wescott, Robert F. and Kurt E. Karl(1992), "Economic Policy Simulations for the Clinton-Gore Economics Transition Team," *The WEFA Group U.S. Macro Special Study*, November 25.