

National Technical University of Athens



GEM-E3 World - Baseline Scenario

GEM-E3-ELITE (JOS3CT970017)

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GEM-E3 WORLD

INTRODUCTION

This study provides a preliminary long run scenario up to 2030. More specifically the baseline scenario simulates a dynamic path of the World economy. The scenario relies on a range of exogenous assumptions associated with the changes of population, technological progress and government expenditures.

THE DRIVERS OF ECONOMIC GROWTH

The model considers as drivers of economic growth the following:

- Population
- Technical Progress
 - Technical Progress of Labour
 - Technical Progress of Energy
 - Technical Progress of Material
- Long Run Expected Growth Rate
- Government Expenditures
- Capital Mobility (capital is mobile across sectors and countries)
- Degree of flexibility of the Labour Market

As can be seen in GEM-E3 World we distinguish three main factors to explain changes in production. Furthermore, the model allows overall technology to differ across countries and sectors taking into consideration the region's particular characteristics and potentials.

Population Trends

The population growth assumptions are presented in the following table:

Table 1: Average Annual per centage rate

	95-00	00-10	10-20	20-30
WORLD ¹	1.6	1.3	1.2	1.0
Nam	0.9	0.7	0.5	0.4
Auz	0.5	0.4	0.1	0.1
Jap	0.3	0.2	-0.1	-0.2
Beu	0.3	0.2	0.2	0.2
Geu	0.3	0.0	-0.1	-0.2
Neu	0.3	0.2	0.1	0.1
Oeu	1.6	1.2	1.0	0.8
Reu	0.2	0.2	0.0	0.0
Eas	1.6	1.3	1.1	0.8
Lam	1.9	1.4	1.2	0.9
Naf	2.9	2.5	2.2	1.9
Afr	3.0	2.7	2.3	2.0
Cea	0.7	0.4	0.3	0.3
Fsu	0.7	0.7	0.6	0.5
Ind	1.7	1.5	1.2	1.0
Chi	1.3	0.9	0.8	0.7
Row	1.3	1.3	1.2	1.1

Due to low birth rates in OECD countries, they show a continuous decline in the population growth rate, from an average 0.7% pa between 1995-2000 period, to an average of 0.1% the 2020-2030 period.

The regions Former Soviet Union and Central European Associates will also experience a slight decline. In Former Soviet Union the population it is expected to change by 0.5% pa during the 1995-2010 period, while the rate of change decreases to 0.6-0.5% the subsequent years. Similarly, Central European Associates face an annual change 0.7% during the initial period while the rate of changes decreases to 0.3% the 2000-2030 period.

North Africa and Sub-Saharan Africa is expected to meet the highest change rate. The percentage change is expected to vary from 2.9% to 1.9% for North Africa and from 3% to 2% for Africa during the projected period.

¹ For the explanation of the acronyms used see Appendix

Due to strong demographic controls in China and in continental Asia the rate of increase seems to decelerate during the projected period. As regard the Dynamic East Asia Economies the rate of change decreases from 1.6% pa the 1995-2000 period to 0.8% the last period.

The Technological Progress

As hypothesized by the baseline scenario technological progress is assumed to be differentiated by factor of production and by country. The derivation of the production factors technological progress has been relied on the estimations implemented by the Directorate for Science Technology and Industry of OECD².

According to the baseline scenario the Asian countries display the highest rate of labour productivity. China and India, due to the experienced high growth rates, will achieve the highest percentage change of labour productivity. In China the labour productivity varies from 3.7% pa during the 1995-2000 period, to 3.9% the 2025-2030 period. Across to the same line, India's productivity varies from 4.4% to 3.8% pa. Dynamic East Asia economies, apart for the first period, will display an annual average change of 3.5%.

The changes of labour productivity will be more moderate in EU countries. In U.K, Nordic EU and Rest of EU regions the productivity will vary around to 2% pa while in Germany and other OECD countries will vary around to 1.5% pa. North America will sustain the current increasing trend of productivity reaching 2.7% per year the 2015-2020 period.

In Japan the labour productivity recovers after 2000 displaying an increase of average rate by 2.5% pa.

At the end, North Africa and Sub-Saharan Africa regions will combine the projected economic growth with an improvement of labour productivity starting from 1.2% and reaching the level 2.8% pa.

Significant increase of the labour productivity will be also achieved by the Former Soviet Union and Central European Associates regions. In particular Central European Associates face an increase from 1%, the 1995-2000 period, to 2.4% the 2025-2030 period. Former Soviet Union starts with an average rate 0.2% to achieve an average rate of 3.7% the last period.

From a sectoral point of view, the baseline assumes that in OECD countries the sectors of market services, trade and transport services, electrical goods and chemical products experience relatively higher growth rates compared to the rest of activities. In a lesser extent the consumer goods industries, transport equipment and food industry are experienced a relative high increase of labour productivity. More analytically in the first group of sectors the labour productivity varies from 1.6% to 2.9% pa while in the second group the labour productivity varies from 1.1% to 2.7%.

² Sakurai N, E. Ioannidis and G. Papakonstantinou (1996): "The Impact of R&D and t/echnology Diffusion on Productivity Growth: Evidence for 10 OECD Countries in the 1970s and 1980s" STI Working Papers

The labour productivity experiences higher growth in the South East Asian Dynamic Economies. At these economies the productivity displays a significant increase after the low levels of 1.2% the 1995-2000 period to 3.8% the 2025-2030 period.

In the developed countries of Africa and Latin America the productivity growth, during the examined period, will bring about a gradual convergence of productivity rates with the developed countries.

Regarding the technical progress of energy will meet a more moderate differentiation across countries and sectors, compared to the labour productivity. OECD regions will display an average annual increase 2% per year while the rest of the regions experience an average increase of 3%. It is assumed that the more energy efficient countries (Japan and China) face an average annual improvement by 3% while the rest of the developing regions experience a more moderate increase by 1.5% pa.

Concerning the technological progress of materials this varies between 1% and 2.5% for OECD countries. More specific it is assumed that the highest changes occur to the sectors of transport equipment, chemical industry, other manufacturing and electrical goods. At these sectors the technological progress of materials increases by 2.5% per year. The sectors of food industry, textiles, ferrous and non ferrous metals, consumer goods and building sector face an increase of 1.8%.

Different is the picture in the developed countries. China will experience an overall increase by 3.5% at the economic activities. On the other side Sub-Saharan Africa Latin America and Africa face a technological progress of material which varies from 1.5% (agricultural sector, food and textile industry) to 1.7% pa (consumer and other equipment goods). India and Dynamic East Asia Economies will experience the highest increase, by 3% pa, in consumer goods industry, other equipment goods, and transport equipment.

Former Soviet Union and Central European Associates it is expected to face a considerable increase of material technological progress. They start from low levels during the 1995-2005 period, around to 0.1%, and they reach the level 3% the 2025-2030 period.

MAIN PROJECTIONS

We have grouped the projection in two main categories, the former refers to the macro results while the latter refers to the sectoral results.

Macro Results

Growth

According to the derived projections the growth rate of the world economy seems to slightly change over the projected period. Although it is accelerated till to 2010, reaching the rate 3.2%, the subsequent years the rate of changes decreases from 3.2% to 2.9% the 2015-2020 period and varies around 3% the 2020-2030 period. As can be

seen from the appropriate we can conclude on the following comments for the individual regions:

EU countries are projected to experience moderate growth in the 2000-2020 period (about 2.5% pa) while the growth rate will decelerate during the following decade. The strong economic fundamentals (no inflationary pressures, low interest rates, exchange rate stability) dominate the Euro zone. This economic background will lift the economic growth till 2010. In addition to this the moderate commodity and oil prices will keep low the inflationary expectations. Afterward, the slowdown of the world economy will influence the performance of European economy.

Another reason of economic slowdown comes from the supply side of the European economy. Some general conclusions derived for OECD countries suggest that the decrease of labour supply as well as the change in the savings rate seems to play an important role in the slowing down of the EU development. OECD estimations³ shows decline growth rates of labour supply (in some of the cases becomes negative) combined with declining participation rates due to the demographical structures.

Similarly, North America will experience an average growth 2.5% pa during the projected period. This represents a significant slowdown in growth when compared to recent years. The slowdown of the North America economies, can be traced to the expected increase of labour costs and of import prices during the projected period. Concerning the labour costs it must be said that there are signs of wages and benefit increase since 1995. As regard the import prices, last years both strength of the dollar and economic crisis of Asia pushed down import prices.

The current economic recession of the Asian economies seems to strongly affect the development of Japan, the slowdown of economic growth will result in an average growth around 2.5% per year. The existing economic problems (long-run liquidity trap) reduce the ability of the economy to produce goods and because of the too little demand. By contrast the Dynamic Asian Economies manage to overcome the current recession achieving an average growth of 5% during the projected period. These economies it is expected to deliver sustained growth since the financial crisis leave intact the driving forces of their economic growth as productivity,

business culture e.t.c. As a result the expected economic growth can be justified by to the subsequent amelioration of terms of trade and the improvement of the domestic potentials.

Economies in transition and Former Soviet Union will expected to recover during the first periods. Initially the growth rate of Former Soviet Union it is expected to increase (about 4%) meeting a more moderate rate the last periods. Similarly, Central European Associates will be developed by an average rate of 4.5% per year.

In accordance with the baseline all developing regions are expected to grow at rates higher than the rates met the last decades. The rates of growth while it is expected to accelerate during the first decade of the new century will decelerate the subsequent decades. The stimulus behind the assumed economic growth of the developing

³ THE WORLDSCAN MODEL: BASCKGROUND AND SIMULATIONS FOR LINKAGES II, OECD, Development Centre June 1997

countries lies on the idea that in most developing economies the majority of the population works in the low productivity sectors (see Ahuja and Filmer (1995)). The rapid growth of the labour supply combined with a changing composition of the labour force (from low skilled or informal sectors to high skilled sectors) represents an important determinant of growth.

According to the projections derived by OECD, human capital will increase substantially in most non-OECD countries. In line with the implemented projections China, the Dynamic South East Asian Economies and South Asia will show a significant increase of human capital. In average terms the ratio of high skilled workers to total labour supply rises from less than 20% in 1995 to more than 30% in 2020. By contrast these figures show a slight increase in Former Soviet Union, the Central European Associates and the Sub-Saharan Africa. In the middle road, the Latin America Countries North Africa and Middle East, will face a more moderate increase.

Another source of economic growth for the developing countries comes from the international trade and the terms of trade improvements because of trade liberalization and lowering of tariffs and quotas. This liberalization is expected to improve the export position of the developing countries and especially the sectors of consumer goods and intermediate products. At the end, the increasing less protection of the agricultural sector in Japan, EU and China will benefit Africa Sub-Saharan Africa and Latin America countries increasing their production substantially.

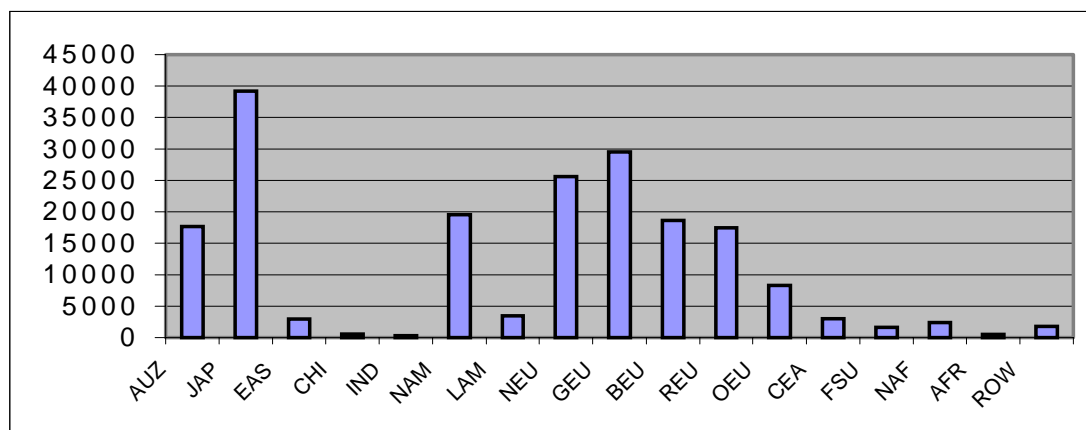
Across to this framework, the growth rate will accelerate for the regions North Africa and Sub-Saharan Africa achieving the rate 3.5% the former and 3% the latter. The upward trend of economic growth will take place for Latin America Countries till to 2010 while the rate decreases the subsequent period.

As for Continental Asia and China these will remain the regions with the highest growth potentials especially at the beginning of the projection period. The rate of growth in China increases with an average rate of 5% while South Asia will grow with an average rate of 4% per year.

As regard the per capita income in 1995 Japan with a per capita GDP of 39,181\$ was clearly ahead of other OECD regions whose per capita income was close to 20,000\$. Non OECD regions were much poorer. In these countries per capita income varies from 324 \$ in India to 3029 \$ for Central European Associates.

By 2030, two particular features characterize the regions' per capita income. According to them while convergence among OECD countries is likely to continue the gap is widening between developed countries and LDC's. On the other side the convergence it will be more pronounced among intermediate income regions with the complete catch up of South East Dynamic Economies and Continental Asia to the group formed by Latin America, Former Soviet Union and Central European Associates.

Figure 1: Per Capita GDP in 17 Regions 1995



Investments

The investments represents one of the model's driving engine. Countries with high growth rates, as China India and Dynamic Asia economies keep a significant annual increase of investments. According to the derived projections China will experience an average rate of investment increase by 3% while in India and in East Asia Dynamic Economies the investment increases reach the 2.5% per year. In this group of countries the improved domestic demand outlook together with favourable financing conditions (we project a lowering of real interest rate) boosted domestic investments to increase.

Across to the european countries the annual increase of investment varies between 1.5 and 3%. UK enjoys an average rate of increase by 3% while Other European Union Countries display a more moderate increase by 1%. The sectors of services, trade and transport and in a lesser extend electronic and chemical goods show a increasing investment trend. On the other hand investments in building and construction agricultural sector, food industry and textiles remain, considerably depressed.

Similar trends are also projected for Australia and New Zealand where investments fluctuates around to 2% per year.

Different is the case of Japan where the investment slightly decreases across to the sectors the 1995-2000 period. Afterward the investment growth is expected to show a moderate increase.

Investments are accelarated strongly in Africa, allowed a pick up by 2005. This growth is foreseen to be supported both by domestic demand and improving exports. On the other side investments stagnate in Latin America displaying an annual increase by 1%.

At the bottom line it must be noted that the above figures for investments does not show any cyclical tendency due to the exclusion of business cycles from the examined economies.

Employment

According to the baseline the total employment turned out particularly strong for Asian countries while it will slightly decline in EU countries or it will remain stable in North America.

As a consequence of favourable developments dominating the future economic growth of the major part of Asia countries, the employment in China it is expected to increase by 3% in India by 2.5% and in South East Asia by 4%.

In EU countries both the future slowdown of growth and the inelasticities of the labour market will affect total employment. As a result these countries display a steadily falling employment levels.

According to the scenario the economy of North America will continue to display an increasing trend for creating new vacancies at least till the 2010-2015 period.

In Central European Associates and Former Soviet Union, despite the expected economic growth, the employment displays a decreasing trend due to the extensive reconstruction of economic activities.

As for the group of developing countries, Africa and Latin America, despite the expected growth employment turns out to increase by substantial lower rates.

In contrast to the aggregate employment level there exists a significant intersectoral mobility. As already have been mentioned in LDCs it is expected an increasing labour mobility from informal and low skilled sectors to more skilled intensive sectors. A representative case is the employment of China's agricultural sector which faces a decrease in employment by 20% during the 2010-2020 period. By contrast the sectors of electronic transport and other equipment, chemical products, will benefit displaying an average annual increase by 10%.

Monetary Developments

While monetary and financial turbulence is likely to occur during the projected period, in the baseline it is assumed a relative stable international monetary environment. So, it is projected moderate inflation rates, low interest rates and foreign exchange rate stability. These monetary developments resulted from a smooth convergence of interest rates across OECD countries and from the assumed free capital mobility. Both monetary policy and central bank interventions are not causing dynamic inconsistencies as regard the future policy.

Consumer Price Index World continued to decrease in 1995-2000 period as it has been doing steadily the last years. A similar trend is evident in both OECD and non-OECD countries. This environment is likely to increase fears for about deflation and sustained decline in prices and economic activity. Although these worries are not exaggerated by the baseline scenario it is assumed a recover of inflationary expectations with a credible commitment of future monetary expansion after the 2005-2030 period.

Additionally, it is worth noticing, that from the baseline scenario we have also excluded any external shock or we have retained the assumption that the potential shocks would have symmetric effects across to the examined economies as a whole.

Sectoral Results

Domestic Production and Investments

From a sectoral point of view the baseline assumes that industrial growth in OECD countries is assumed to occur mainly through, banking and financial industry, trade and transport, transport equipment chemicals and other services. In a lesser extent the development of the energy sector (mainly gas and electricity) will contribute to the industrial growth. At the same countries the growth of the public sector is assumed to be very slow.

Some of the main assumptions of the scenario as regard the domestic production and the investments are as follows:

In Germany U.K. and Rest of Euporean Union industrial growth is assumed to occur mainly through services, trade and transport and chemicals goods. Production of materials and other energy intensive products and transport equipment will also slightly increase. Production will stagnate in construction, agriculture and textiles. At the end, the rate of increase of services will continue to be higher than GDP growth rate. In Rest of Euporean Union the outlook of building and construction appears better compared to the rest of european countries. The annual percentage change displays an increase by 3%.

In other OECD countries growth is balanced, benefiting almost all sectors. Increases in food trade and transport, textile services and chemical and other manufacturing products are also projected to be in accordance with GDP growth rate.

In Nordic countries it is assumed that energy intensive sector have a considerable increase while transport equipment and services also increase above GDP.

Australia and New Zealand keep industrial activity through chemical products other equipment goods consumer goods and food industry.

In North America again services, trade and transport as well as credit and insurance is supposed to dominate the domestic production. Other sectors as chemicals, transport equipment other manufacturing products are expected to contribute to growth less spectacularly than the aforementioned sectors.

In China growth comes from a general increase of all the sectors of the economy. In particular activities in electronic equipment, other manufacturing, food industry other equipment and energy intensive goods, trade and transport, services and chemical products, are assumed to achieve the highest growth. In a lesser extend growth comes from agricultural sector, textile industry. The energy sector, apart from natural gas, is also projected to increase by 4% per year.

India also keep industrial activity through chemical products, food industry and chemical products, while textiles, agricultural sector and building and construction and other equipment meet high growth rates of domestic production.

In Dynamic East Asia Countries after a five year period of considerable restructuring that lasts up to 2000, manufacturing is assumed to rebound. High increases are projected to the transport equipment, food industry trade and transport textile industry and chemical products. In a lesser extend agricultural, electricity and services are also expected to contribute to growth.

In Japan transport equipment, food industry trade and transprort all face a moderate increase. The industrial production other sectors is rather stabilised or facing a decreasing trend.

In Central European Associates the energy sector is expected to contribute to the growth. After the first period recover, the chemical sector, food industry, transport equipment and other manufacturing products is assumed to strongly rebound being one of the main driving forces of economic growth.

Similar trends are also projected in the Former Soviet Union. The increase of the manufacturing activity is maintained through chemical products, other energy intensive industries, transport equipment, food industry and other manufacturing products. In both regions the development of the government sector will experience an average rate of 2%.

In Africa food industry, trade and transport, textile services and agricultural sector, consists the main growth engines. Services and non market services are also assumed to growth with an average rate of 2% per year.

Latin America countries food industry, other energy intensive industry chemical products and non market services are assumed to flourish

Appendix

The Data Set Used

The Global Trade Analysis Project Version 4⁴, issued by Purdue University, have been employed as the major data source for constructing the global SAM. This data set includes I-O tables, National Income and Products Accounts providing in this way a global economic dataset. In addition to this data set information from the ENER DATA and International Financial Statistics (various years) from IMF have been also processed.

It must be noted that the acronyms for world regions as used at the present study are presented in the following Table

Acronyms of world regions

Nam	North America
Auz	Australia and N. Zealand
Jap	Japan
Beu	U.K.
Geu	Germany
Neu	Nordic EU
Reu	Rest of EU
Oeu	Other OECD
Eas	South East Asia Dynamic Economies
Lam	Latin America
Afr	Sub-Saharan Africa
Naf	North Africa
Cea	Central European Associates
Fsu	Former Soviet Union
Ind	South Asia-India
Chi	China
Row	Rest of the World

⁴ A list of applications based on the GTAP v4 framework can be found at the GTAP home page:
<http://www.agecon.purde.edu/gtap/apps/>

TABLE 1*Labour Technological Progress : Annual Percentage Change*

	1995- 2000	2000- 2005	2005- 2010	2010- 2015	2015- 2020	2020- 2025	2025- 2030
North America	1.5	2.2	2.2	2.5	2.7	1.8	1.2
Australia and New Zealand	1	1.9	1.6	1.6	1.8	1.4	1.3
Japan	1.1	1.8	1.8	1.8	1.9	1.9	2.7
U.K	2	2.9	2.9	2	1.9	1.2	1.6
Germany	1.2	1.6	1.5	1.4	1.2	1.2	1.1
Nordic European Countries	1.8	2.9	2.4	2.1	1.9	2.1	2.7
Other OECD Countries	1	1.3	1.4	1.4	1.4	1.8	1
Rest of European Countries	2	1.6	2.1	2.2	2	1.6	1.9
South East Asia	1.4	2.4	3.3	3.4	3.7	3.9	3.9
Latin America	2.8	2.8	2.8	2.8	3.7	3.7	3.7
Central European Associates	0.7	1.7	2	2	2.1	2.4	2.4
Former Soviet Union	0.2	2.8	3.4	3.6	3.7	3.7	3.7
India	4.4	4.4	4.4	3.8	3.8	3.8	3.8
China	3.7	3.7	3.7	3.9	3.9	3.9	3.9
North Africa	2.1	2.5	2.8	3.2	3.3	3.4	3.5
Sub-Saharan Africa	1.1	1.1	1.7	1.7	2	2	2

TABLE 2*Material Technological Progress: Annual Percentage Change*

	1995- 2000	2000- 2005	2005- 2010	2010- 2015	2015- 2020	2020- 2025	2025- 2030
North America	2.1	2.1	2.1	2.2	2.1	2.4	2.3
Australia and New Zealand	0.9	1.1	1.7	1.6	1.5	1.7	2.1
Japan	1.5	2.2	3.2	3.2	3.2	3.4	3.6
U.K	1.1	1.1	1.1	1.1	1.5	1.6	1.7
Germany	0.2	0.6	0.5	0.7	0.9	1.1	1
Nordic European Countries	2.2	1.2	1.2	1.6	1.9	1.9	1.9
Other OECD Countries	0.9	1.1	1.5	1.8	2.1	2.4	2.5
Rest of European Countries	1.1	1.1	1.1	1.1	1.1	1.3	1.4
South East Asia	1.1	1.6	2.3	2.7	2.9	3.1	3.1
Latin America	1.1	2.9	3.3	3.5	3.8	3.9	3.8
Central European Associates	1.3	2.3	2.5	2.6	2.7	2.7	2.7
Former Soviet Union	0.1	2.6	3.3	3.4	3.6	3.7	3.8
India	2.1	2.1	2.5	2.2	2.5	2.5	2.6
China	3.9	3.5	3.9	3.5	3.6	3.7	3.8
North Africa	2.1	2.5	2.8	3.2	3.3	3.4	3.5
Sub-Saharan Africa	1.2	1.1	1.1	1.7	2	2	2

TABLE 3*Energy Technological Progress : Annual Percentage Change*

	1995- 2000	2000- 2005	2005- 2010	2010- 2015	2015- 2020	2020- 2025	2025- 2030
North America	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Australia and New Zealand	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Japan	2.5	2.5	2.5	2.5	2.5	2.5	2.5
U.K	2	2	2	2	2	2	2
Germany	2	2	2	2	2	2	2
Nordic European Countries	2	2	2	2	2	2	2
Other OECD Countries	2	2	2	2	2	2	2
Rest of European Countries	2	2	2	2	2	2	2
South East Asia	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Latin America	1.5	1.5	1.5	1.5	1.5	1.5	1.5
North Africa	2	2	2	2	2	2	2
Sub-Saharan Africa	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Central European Associates	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Former Soviet Union	2	2	3.3	3.3	2.3	2.3	2.3
India	1.2	1.2	1.2	1.2	1.2	1.2	1.2
China	3.5	3.5	3.5	3.5	3.5	3.5	3.5

TABLE 4*GDP : Annual Percentage Change*

	1995- 2000	2000- 2005	2005- 2010	2010- 2015	2015- 2020	2020- 2025	2025- 2030
North America	3.26	2.69	2.42	2.34	2.54	2.1	1.7
Australia and New Zealand	1.94	2.6	2.9	2.22	1.76	1.16	2.8
Japan	0.31	2.09	2.84	1.95	2.2	1.02	1.4
U.K	0.87	0.27	2.75	1.92	2.13	3.02	1.6
Germany	1.7	2.4	2.88	1.38	1.81	1.63	1.79
Nordic European Countries	3	2.22	1.92	2.43	1.59	2.1	1.09
Other OECD Countries	3.32	3.45	3.84	3.81	4.1	6.67	3.04
Rest of European Countries	2.89	2.37	3.35	2.58	1.77	2.05	2.0
South East Asia	2.81	5.38	5.91	5.07	4.68	4.01	3.29
Latin America	2.45	3.21	2.29	1.99	1.69	1.30	2.49
Central European Associates	2.67	5.33	5.6	3.83	3.76	2.35	2.12
Former Soviet Union	0.97	5.99	4.81	3.5	3.31	2.99	3.31
India	5.23	3.16	3.75	2.24	3.08	2.01	2.86
China	8.08	5.54	5.39	4.2	4.62	3.22	2.86
Sub-Saharan	3.92	3.12	2.68	4.56	4.21	3.55	2.34
North Africa	2.71	2.34	2.08	2.48	2.14	2.65	2.63
Rest of the World	6.77	5.78	5.91	4.65	5.23	4.71	4.61

TABLE 5
Investments : Annual Percentage Change

	1995- 2000	2000- 2005	2005- 2010	2010- 2015	2015- 2020	2020- 2025	2025- 2030
North America	1.24	1.17	1.4	1.42	1.26	2.36	1.32
Australia and New Zealand	1.35	1.91	0.65	2.45	1.52	1.21	1.24
Japan	-4.9	1.38	-0.23	1.35	0.96	-1.66	-0.74
U.K	2.04	1.53	2.08	1.61	2.78	2.42	3.47
Germany	1.39	1.42	1.99	1.46	1.11	2.05	2.1
Nordic European Countries	0.86	1.68	1.12	0.88	0.49	0.96	0.87
Other OECD	3.36	2.7	2.64	2.72	2.5	4.47	2.54
Rest of European Countries	0.13	2.24	2.51	2.16	1.10	1.25	2.84
South East Asia	1.8	3.3	3.6	3.82	3.8	3.2	3.2
Latin America	0.48	0.04	0.69	1.18	0.22	0.96	-0.12
Central European Associates	0.48	1.66	2.38	1.96	1.46	2.59	1.59
Former Soviet Union	-0.38	2.34	5.79	1.79	1.22	2.10	1.83
India	3.74	1.96	1.75	1.95	1.58	1.6	2.1
China	2.99	2.96	3.6	3.8	2.7	3.15	4.45
Sub-Saharan	-5.42	5.57	2.45	3.05	6.22	4.25	2.61
North Africa	0.65	1	1.75	1.77	1.48	0.70	0.90
Rest of the World	5.83	1.73	2.42	3.8	3.48	6.11	6.73

TABLE 6
Consumer Price Index: Annual Percentage Change

	1995- 2000	2000- 2005	2005- 2010	2010- 2015	2015- 2020	2020- 2025	2025- 2030
North America	3.36	4.5	6.02	3.89	3.44	2.8	5.04
Australia and New Zealand	5.8	7.19	6.75	5.49	4.39	4.82	6.02
Japan	0.15	6.06	4.56	4.75	4.15	4.72	3.45
U.K	4.2	3.6	6.6	5.6	4.9	3.4	3.23
Germany	2.37	3.32	5.6	5.35	4.42	4.35	5.72
Nordic European Countries	3.4	4.15	7.06	5.23	5	4	6.04
Other OECD Countries	3.95	7.07	6.5	4.66	3.82	1.24	5.82
Rest of European Countries	4.5	9.2	6.38	5.21	5.02	4.64	4.76
South East Asia	4.65	6.23	6.23	4.58	3.56	3.6	5.36
Latin America	2.17	4.17	6.36	4.92	4.42	4.23	6.73
Central European Associates	6.02	8.37	6.90	5.58	4.36	4.79	5.78
Former Soviet Union	5.62	2	4.49	4.08	3.67	3.52	6.09
India	2.77	5.85	6.42	5.29	4.08	4.12	6.36
China	6.97	5.71	5.48	4.19	3.56	3.63	5.76
Sub-Saharan	0.69	6.39	6.50	3.50	3.38	3.06	5.99
North Africa	2.19	6.05	6.69	4.48	4.28	3.97	6.09
Rest of the World	19.7	25.36	12.02	8.5	4.93	4.47	6.52

TABLE 7
Private Consumption : Annual Percentage Change

	1995- 2000	2000- 2005	2005- 2010	2010- 2015	2015- 2020	2020- 2025	2025- 2030
North America	4.31	2.51	2.61	2.15	2.50	2.85	2.05
Australia and New Zealand	3.46	2.65	3.00	2.13	1.82	1.06	2.39
Japan	0.37	1.60	2.02	1.38	1.56	0.68	3.64
U.K	3.87	2.42	3.02	1.85	2.27	2.64	0.69
Germany	2.75	2.24	2.69	1.39	1.76	1.50	1.62
Nordic European Countries	3.15	1.79	1.88	1.97	1.45	1.63	1.45
Other OECD Countries	3.97	3.17	3.84	3.35	3.49	5.57	2.69
Rest of EU	4.19	3.39	3.35	2.39	2.03	2.18	2.86
South East Asia	2.77	5.85	6.42	5.29	4.08	4.12	6.36
Latin America	2.65	2.58	2.34	1.85	1.66	1.16	0.39
Central European Associates	4.83	5.85	5.97	3.83	3.88	2.37	2.86
Former Soviet Union	2.73	4.44	4.34	2.90	2.94	2.42	1.86
India	6.03	3.05	4.01	2.18	3.01	1.79	1.62
China	8.14	5.49	5.45	4.11	4.51	2.99	2.66
Sub-Saharan	4.24	3.37	3.22	4.42	4.15	3.34	2.41
North Africa	2.83	2.16	2.39	2.21	2.07	1.49	1.56
Rest of the World	26.99	8.71	7.11	5.03	5.34	4.56	4.67

