

OECD

OECD Economic Projections

Introduction

What is unique about the process?

Twice a year, in June and December, the OECD publishes its *Economic Outlook (EO)*, which contains projections for a number of key economic variables over a two to two and a half-year horizon.

Who is responsible for the projections and analysis?

Although almost universally referred to as “forecasts”, estimates published in the *EO* are better characterised as “projections”, since they are conditional on a number of key technical assumptions such as future developments in exchange rates and commodity and energy prices. Announced government policies are also assumed to remain unchanged over the projection period. This does not imply that the OECD necessarily assumes that governments will – or should – achieve their stated objectives. Rather this assumption serves to illustrate what are the most likely outcomes for growth, inflation and employment given announced policies. This in turn helps to identify potential problems in the economy and to foster a debate among policy makers about what can be done to achieve better outcomes.

What assumptions are made?

What do the short-term projections cover?

What about national economies?

What are the critical variables and relationships?

Thus, the projections are accompanied by analysis, which weighs the upside (e.g. inflation) and downside (e.g. recession) risks. Based on these risks, the OECD Secretariat may arrive at judgements about the likely policy response of governments or may itself recommend changes in policy settings. The area-wide projections, related analysis and recommendations are presented in the General Assessment chapter of the *EO*.

What does analysis add to the package?

The *EO* also includes chapters on the economic conditions and prospects in individual OECD Member countries and selected non-Member countries, and on topics of current interest in economic policy debates, along with a rich statistical annex.

Are OECD's projections accurate?

But, with many economic forecasts being published these days, one may ask what distinguishes the OECD projections? This *Policy Brief* discusses special features of the OECD projections which are generally absent in other forecasting efforts, in particular the process by which the projections are compiled and their scope and content. It also considers the extent to which it is useful to reflect on their accuracy.

For further reading

Where to contact us?

Overall, it is fair to say that the main focus of OECD projections is on framing the policy debate rather than on predicting the future. As such, they complement other forecasting exercises. ■

Observer oecd

© OECD 1999

Organisation for Economic Co-operation and Development

What is unique about the process?

The OECD process is unique in the way it ensures that the projections are consistent at the world level. First, consistency is sought through the OECD Secretariat's "internal" production process. Each semi-annual forecasting exercise starts with a broad exchange of views among OECD country experts and topic specialists. This provides a consistent starting point for the global outlook and its potential interactions with individual country projections through trade and financial linkages.

Country expertise is drawn from the surveys of Member country economies.

The aim for consistency is both "horizontal", meaning that projections of imports and exports have to "add up" when totalled across countries, and "vertical", meaning that projections for individual countries are in line with external developments. A macro-econometric model, Interlink, is employed as a tool to help ensure this overall consistency. The model, which is frequently updated, also plays a role in testing alternative policy assumptions and identifying the major risks present in the overall projections.

Naturally, judgement is also applied to arrive at the final projections: first, in assessing initial individual country conditions and, second, in evaluating the results generated by the model. Moreover, during this process, the overall and country pro-

jections are subject to extensive internal scrutiny, in particular through detailed discussions between OECD Secretariat country experts and topic specialists covering such aspects as monetary and fiscal policies, inflation and international trade.

At the next stage, the Secretariat holds extensive discussions on the projections and related analyses with Member country government experts and policy makers. The Secretariat meets with government economic forecasters to test its tentative conclusions against their knowledge of local conditions. The main lines of the EO projections and Secretariat analysis are presented to, and their policy implications discussed by, the OECD Economic Policy Committee, which is composed of senior officials from finance or economic ministries and central banks.

Finally, country expertise is drawn from the surveys of Member country economies published regularly by the OECD (*see For further reading, page 8*). All Member countries participate in the production of their own as well as other countries' surveys. This produces a body of knowledge on these economies that is continually tested in discussion and debate with Member country economists and policy makers. ■

Who is responsible for the projections and analysis?

The discussions between the OECD Secretariat and national policy makers are valuable because they harness Member countries' knowledge and expertise. However, while being given due consideration, comments

and suggestions from Member countries are not automatically reflected in the final version of the EO. In the end, the published projections and analysis reflect the independent assessment of economic conditions in the world economy by the OECD staff economists. The EO is published under the responsibility of the Secretary-General. ■

What assumptions are made?

OECD's projections are conditional on technical assumptions about future developments in exchange rates as well as on oil and non-oil commodity prices. They are also dependent on assumptions regarding fiscal, monetary and structural policies.

Fiscal and monetary policy assumptions are generally based on stated official policies.

Exchange rates are generally assumed to remain constant over the projection period. Where inflation differentials or the stance of monetary policy have implications for exchange rates, these are generally highlighted and discussed in the analysis that accompanies the projections.

The price of imported crude oil is set on the basis of an assessment of trends in the world oil market. Experts of the International Energy Agency, which keep tabs on the world oil market, are consulted in setting the projected

price in the short term. Beyond the short-term horizon, oil prices are generally assumed to remain constant in real terms. Other commodity prices are also set to reflect supply and demand conditions in various markets in the first half year of the projection period. Subsequently, as for oil prices, they are projected to move in line with OECD inflation.

Medium-term scenarios look out five to six years.

Fiscal and monetary policy assumptions for individual countries are generally based on stated official policies provided they are embodied in well-defined programmes. For instance, government spending and revenue projections are based on the most recent budgetary statements. Policy-controlled interest rates are set in line with the stated objectives of the national monetary authorities as interpreted by the OECD Secretariat.

From time to time, medium-term scenarios, looking out five to six years, are also published. These scenarios tend to focus on longer-term macroeconomic and structural issues. They typically provide a basis for comparison between the OECD medium-term reference scenario and alternative simulations based on different assumptions. The medium-term reference scenario extends the short-term projections on a consistent basis over a five-year horizon. It is highly conditional on assumptions about policies and economic developments. More specifically, the reference sce-

nario does not embody a view about the timing and extent of future cyclical events. Instead, it assumes a pattern of growth such that the gap between actual and potential output is broadly eliminated in all OECD countries over the medium term. Commodity prices and exchange rates are kept unchanged in real terms. Monetary policies are assumed to be directed towards keeping inflation low, and fiscal policies are, for the most part, assumed to be consistent with continued fiscal consolidation.

Over the past few years, these scenarios have been conducted to illustrate issues such as long-term prospects for government budgets; the causes of widening current account imbalances; and the interactions between labour markets, social transfers and budget consolidation. ■

What do the short-term projections cover?

The table on page 4, adapted from one which appeared in the *EO* published in June 1999, presents the OECD's projections of the principal macroeconomic indicators for the main OECD countries and regions.

Core projections are only the “tip of the iceberg”.

The projections are generally cast in terms of percentage changes to facilitate comparisons. Estimates of domestic demand and output (GDP)

are made in “real” terms, i.e. adjusted to eliminate the effect of inflation. The inflation numbers relate to so-called “GDP deflators”, a measure of “domestic” inflation, whereas other inflation indicators, such as consumer price indices, also reflect prices of imported goods. Unemployment projections are based on national definitions. The current account balance is a broad measure of a country's external position. It includes the balance of trade in goods and services as well as the balance on foreign investment income and official transfers.

These core projections are only the “tip of the iceberg”. A vast number of other variables are projected as well. These include private and public consumption and investment, exports and imports of goods and services, potential output and related output “gaps”, wages, consumer prices and various other measures of inflation, employment and participation in the labour force, household saving rates, government financial balances and indicators of competitiveness. All these projections are published in the *EO* Annex tables that track their evolution over time. The numbers thus generated are used to derive estimates for the main economic indicators (such as real GDP) and underpin the accompanying analysis. Now and again, reflecting policy relevance at the time of publication, the *EO* dedicates a chapter to one of these indicators, for example unemployment, competitiveness, household saving rates or business investment, to examine trends and seek underlying explanations for them. ■

Summary of projections^a
Seasonally adjusted at annual rates

	1998	1999	2000	1999		2000	
				I	II	I	II
Percentage changes from previous period							
Real GDP							
United States	3.9	3.6	2.0	4.2	2.0	2.0	1.9
Japan	-2.8	-0.9	0.0	-0.8	0.0	0.0	-0.1
European Union	2.8	1.9	2.4	1.6	2.3	2.4	2.6
Total OECD	2.3	2.2	2.1	2.4	2.1	2.1	2.1
Per cent							
Inflation (GDP deflator)							
United States	1.0	1.1	1.5	1.2	1.1	1.5	1.7
Japan	0.4	-0.7	-0.6	-0.2	-0.7	-0.4	-0.7
European Union	1.8	1.7	1.7	1.8	1.7	1.7	1.7
Total OECD	3.1	2.4	2.2	2.7	2.2	2.2	2.1
Per cent of labour force							
Unemployment							
United States	4.5	4.2	4.4	4.2	4.2	4.4	4.5
Japan	4.1	4.9	5.3	4.8	5.1	5.2	5.4
European Union	10.5	10.1	9.8	10.2	10.1	9.9	9.7
Total OECD	7.1	7.0	7.0	7.0	7.0	7.0	7.0
Per cent of GDP							
Current account balances							
United States	-2.7	-3.4	-3.5	-3.3	-3.5	-3.5	-3.4
Japan	3.2	3.0	3.5	2.8	3.3	3.4	3.6
European Union	1.1	1.0	1.0	0.9	1.0	1.0	1.0
Total OECD	-0.1	-0.5	-0.5	-0.5	-0.5	-0.5	-0.4
Per cent							
Short-term interest rates							
United States	4.8	4.5	4.5	4.4	4.5	4.5	4.5
Japan	0.7	0.3	0.4	0.3	0.2	0.3	0.4
Euro area	3.9	2.7	2.6	2.9	2.6	2.6	2.6
Percentage changes from previous period							
World trade	4.5	3.9	5.6	3.9	5.7	5.7	5.6

a. Assumptions underlying the projections include:
no change in actual and announced fiscal policies;
unchanged exchange rates from 26 April 1999; in particular \$1 = Y 119.15 and \$1 = 0.942 euro;
the cut-off date for other information used in the compilation of the projections was 4 May 1999.

What are the critical variables and relationships?

The performance of an economy reflects the interaction of many economic variables and underlying relationships. The variables considered most significant vary depending on the circumstances and the policy issues of the day, but it would be fair to say that special attention is given to data that indicate how economies are performing in relation to their potential. Are markets tight, or is there spare capacity? The main economic relationships examined by the

OECD Secretariat are discussed in abbreviated form below. A fuller and more technical description can be found in the paper *Sources and Methods* available on the OECD web site (www.oecd.org/eco/out/source.htm).

Domestic expenditure

Projections of private consumption typically take into account real disposable income, household wealth, changes in the rate of inflation, mon-

etary and financial conditions, and leading indicators of consumer confidence and retail sales. Business fixed investment is typically assessed in relation to non-financial indicators (sales, output and capacity utilisation) and financial variables (cash flow and interest rates). Business survey information is also taken into account. Projections for residential construction take account of demographic trends, housing stocks, real income and financial conditions,

and also draw on cyclical indicators for the construction sector. Projections of stockbuilding are usually made with reference to relevant stock-output and stock-sales ratios.

Employment, wages and prices

Employment and other labour market trends are typically assessed on the basis of actual and projected output. Important additional elements relate to productivity trends, capacity constraints and costs. Unemployment rate projections are computed from employment and labour supply projections, with the latter assessed on the basis of demographic trends and participation rate assumptions. Wage and earnings assessments take into account a number of key factors. Extensive use is made of the pattern of current wage settlements data as a leading indicator. Labour market demand pressures, produc-

tivity rates and the terms of trade also influence the overall projection for real wages and real compensation per employee. The assessment of domestic prices and inflation trends depends crucially on unit costs, the strength of demand and output gaps and foreign prices.

Output gaps

The output gap is measured as the percentage difference between actual GDP in constant prices and estimated potential GDP. Because they cannot be observed, output gaps are difficult to estimate and subject to margins of error. Potential output is based on a production function approach, taking into account the capital stock, changes in labour supply, factor productivities and underlying “non-accelerating” wage rates of unemployment for each Member country.

Foreign trade and balance of payments

Particular attention is given in the forecasting exercise to ensuring the consistency of international trade volume and price projections, since trade represents a principal channel through which developments in one country affect other economies. The initial projections for import volumes are derived from activity (expenditure) and lagged competitiveness positions. Export volume projections are based on developments in export markets and competitiveness positions. Projections for export prices are based initially on movements in unit labour costs, import prices, and competitors' export prices while import prices are derived as weighted averages of foreign costs and domestic prices. Investment income receipts and payments reflect returns on stocks of external assets and liabilities. ■

What about national economies?

The *EO* assesses world developments, but it also focuses on the prospects in individual OECD economies. Detailed projections

encompassing all the variables mentioned above are prepared for each Member country. Somewhat less detailed projections are made

for a selected number of non-Member economies. The table below is illustrative of Member country projections. ■

United States – Demand and Output
Percentage changes, volume

	1995 current prices billions	1996	1997	1998	1999	2000
Private consumption	4953.9	3.2	3.4	4.9	4.5	2.6
Government consumption	1138.1	0.7	1.3	1.1	1.8	0.3
Gross fixed investment	1230.9	7.9	7.3	9.7	6.1	1.0
Public	218.4	3.4	1.2	0.1	4.3	1.6
Residential	284.8	7.4	2.5	10.4	5.3	-5.3
Non-residential	727.7	9.3	10.7	11.8	6.8	3.0
Final domestic demand	7322.9	3.6	3.8	5.2	4.5	2.0
Stockbuilding ^a	30.6	0.0	0.5	-0.1	-0.3	-0.1
Total domestic demand	7353.5	3.6	4.2	5.1	4.2	1.9
Exports of goods and services	819.5	8.5	12.8	1.5	2.7	5.7
Imports of goods and services	903.4	9.2	13.9	10.6	7.6	4.3
Net exports ^a	-83.9	-0.2	-0.4	-1.4	-0.9	0.0
GDP at market prices	7269.6	3.4	3.9	3.9	3.6	2.0
Industrial production	-	4.5	6.0	3.7	1.4	1.8

a. Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.

What does analysis add to the package?

The analysis accompanying the OECD's economic projections draws out additional meaning from the numbers and assigns, explicitly or implicitly, probabilities to the outcomes they represent. Beyond that, the analysis suggests ways to deal with emerging economic problems identified by the projections – such as steps to offset or cushion downside risks, or ways to deal with overheating without necessarily plunging an economy into recession.

Since the early 1980s OECD governments generally have aimed to follow policies designed to bring down inflation and maintain price stability, and consolidate government finances, all in a medium-term perspective.

To increase efficiency, raise output and improve living standards they have pursued product and labour market reform. Social policies, too, have been on the reform agenda, to ensure that countries can afford them, but also to improve their performance.

Interaction between OECD and non-OECD economies has increased.

Over the same period, interaction between OECD and non-OECD economies has increased, with the

consequence that OECD economists have had more and more to take into account developments in the world economy in making projections and analytical judgements. Financial flows have also become increasingly important in shaping developments in real activity. All these themes have been dealt with in chapters devoted to them in recent issues of the *EO*. ■

Are OECD's projections accurate?

OECD projections are just that, projections not predictions. Analysis enriches the projections and provides a framework for evaluating outcomes and recommending policy changes. As to the risks, analysis can only point to them, it cannot say precisely which ones will occur or when. Economics is not an exact science. It deals ultimately with human

The *EO* often presents alternative scenarios.

behaviour, which changes based on experience and expectations. And it must strive to adapt as economies and economic systems evolve. For example, not too many years ago, monetary policy setting leaned heavily on measures of monetary aggregates. Then financial markets introduced innovative financial products, and other changes intervened. As a result com-

parisons over time became more difficult and the targeting of monetary aggregates to guide monetary policy declined in importance.

The OECD Secretariat regularly reviews its projections for accuracy. A main purpose of these reviews is to isolate whether errors are due to data revisions, to the non-realisation of underlying assumptions or to judgemental mistakes about economic conditions and forces shaping the outlook. Indeed, sometimes projections show current policies leading to unsatisfactory outcomes, which may lead to policy changes, in turn showing up as (desirable) projection errors. Large projection errors typically occur around major turning points in economic activity. The reasons for this are subject to debate. They may be due to lapses in judgement, or a decline in the predictive power of the information available at cyclical turning points (see box opposite).

The OECD is sometimes criticised by commentators for taking an overly optimistic view of economic prospects. While we do not believe this to be the case, the criticism has the merit of underscoring the importance of assessing the projections in terms of probabilities. To bring this point home, the *EO* often presents alternative scenarios. Such analysis sets out a range of possible outcomes to which different likelihoods can be attached and serves to highlight the risks and uncertainties in any projection. ■

Projecting economic performance in the wake of a major shock

Projection errors may occur because of unforeseen events or shocks. Once these events unfold, the projections are of course adjusted. However, the implications of major shocks are difficult to assess because they induce changes in behaviour or secondary and tertiary effects. This is particularly the case for financial markets, which are generally more volatile.

Perhaps the best recent example of a major shock is the Asian crisis. In March 1998, when the projections published in *EO63* were in preparation, the financial crisis that had begun during the summer of 1997 in several emerging market economies had spread to Korea (an OECD Member country) and had started to generate a number of indirect consequences. Among them, one

can cite the decline in oil and non-oil commodity prices and the lowering of long-term interest rates due to the safe-haven phenomenon. At that time, changes in imports and exports for the OECD area (including Korea) were projected to lead to a current account adjustment of about \$20 billion between 1997 and 1998 (\$40 billion, excluding Korea), continuing through 1999. In the event, the adjustment was more rapid than anticipated (see table below), amounting to close to \$60 billion already in 1998 (\$100 billion, excluding Korea).

Nevertheless, taking account of the direct and indirect effects of the crisis, OECD real GDP was projected to grow by 2.4 per cent in 1998. This coincides closely with a final outcome of 2.3 per cent, indicating

that, for the area as a whole, the global implications of the Asian crisis were captured rather well.

On the other hand, significant errors were made in the projections for major regions within the OECD, which tended to offset each other. Among other things, this reflects the difficulty of assessing the varying implications of developments indirectly related to the Asian crisis for countries' growth performance. Such developments include *inter alia* reductions in interest rates in several OECD countries, in part policy-induced to counteract the negative impact of the crisis, movements in bilateral exchange rates between major OECD economies and the increase in stock market valuations in several countries. ■

	EO63 (June 1998)	Outcome
Change in OECD current account balance between 1997 and 1998	-\$18 bn	-\$56 bn
Excluding Korea	-\$41 bn	-\$105 bn
Real GDP growth for 1998, per cent		
OECD	2.4	2.3
United States	2.7	3.9
Japan	-0.3	-2.8
European Union	2.7	2.8

The OECD Policy Briefs are prepared by the Public Affairs Division,
Public Affairs and Communications Directorate.
They are published under the responsibility of the Secretary-General

The OECD Policy Briefs are available on the OECD's Web site

www.oecd.org/publications/Pol_brief/

For further reading

- **Economic Outlook No. 65, June 1999**
ISBN 92-64-16166-X, US\$42, pp.270.

A preliminary edition of the Outlook, including the summary of projections, is published on the OECD Web site approximately one month prior to the publication of the book: www.oecd.org/eco/out/Eo65.htm.

- **OECD Economic Surveys**

Economic Surveys review the economies of Member countries and, from time to time, selected non-Members. Each Survey includes an analysis of recent economic developments and policy recommendations, a structural chapter examining one or more sectors or features of the economy being reviewed (e.g. unemployment, environment policy), numerous tables and graphs, a detailed statistical annex and a fold-out table comparing basic economic data for all OECD Member countries. Approximately 18 Surveys are published each year. They are available individually or by subscription. For more information, consult the Periodicals section of the OECD online Bookshop at www.oecd.org.

- **OECD Economic Studies**

This journal appears twice each year. It features articles on applied economics and statistical analysis, generally with an international or cross-country dimension. US\$69. To order, consult the Periodicals section of the OECD online Bookshop at www.oecd.org.

- **EMU: Facts, Challenges and Policies, 1999**
ISBN 92-64-17027-8, US\$36, pp. 218.

This publication studies the euro zone as an economic entity, reviews the extensive preparations that led to the introduction of the single currency and examines the policy issues raised by monetary union. Despite the degree of macroeconomic convergence already achieved and the institutional framework in place, uncertainties remain. Mechanisms to co-ordinate monetary and budgetary policies are still to be fully defined. And the euro zone's ability to absorb economic shocks must be strengthened.

- **Additional Information**

More information about the work of the OECD Economics Department, including information about other publications, data products and Working Papers available for downloading, can be found on the Department's Web site at www.oecd.org/eco/eco/.

Where to contact us?

FRANCE

OECD Headquarters
2, rue André-Pascal
75775 PARIS Cedex 16
Tel: 33 (0) 1 45 24 81 81
Fax: 33 (0) 1 45 24 19 50
E-mail: sales@oecd.org
Internet: www.oecd.org

GERMANY

OECD BONN Centre
August-Bebel-Allee 6,
D-53175 BONN
Tel: (49-228) 959 12 15
Fax: (49-228) 959 1218
E-mail: bonn.contact@oecd.org
Internet: www.oecd.org/bonn

JAPAN

OECD TOKYO Centre
Landic Akasaka Bldg
2-3-4 Akasaka, Minato-Ku
TOKYO 107
Tel: (81-3) 3586 2016
Fax: (81-3) 3584 7929
E-mail: center@oecdtokyo.org
Internet: www.oecdtokyo.org

MEXICO

OECD MEXICO Centre
Edificio Infotec,
Av. San Fernando No. 37
Col. Toriello Guerra
Tlalpan C.P.
14050 MEXICO D.F.
Tel: (525) 528 10 38
Fax: (525) 606 13 07
E-mail: ocde@rtn.net.mx
Internet: rtn.net.mx/ocde/

UNITED STATES

OECD WASHINGTON Center
2001 L Street N.W.,
Suite 650
WASHINGTON D.C. 20036-4922
Tel: (1-202) 785 6323
Fax: (1-202) 785 0350
E-mail:
washington.contact@oecd.org
Internet: www.oecdwash.org
Toll free: (1-800) 456 6323