

Economic forecasting and policy – the international dimension

**John Llewellyn, Stephen Potter
and Lee Samuelson**

Economic forecasting and policy – the international dimension

**John Llewellyn, Stephen Potter
and Lee Samuelson**



Routledge & Kegan Paul
London, Boston, Melbourne and Henley

First published in 1985

by Routledge & Kegan Paul plc

14 Leicester Square, London WC2H 7PH, England

9 Park Street, Boston, Mass. 02108, USA

*464 St Kilda Road, Melbourne,
Victoria 3004, Australia and*

*Broadway House, Newtown Road,
Henley on Thames, Oxon RG9 1EN, England*

Set in Linotron Times 10 on 12 point

by Text Processing, Ireland

and printed in Great Britain

by Billing & Sons Ltd., Worcester

© John Llewellyn, Stephen Potter and Lee Samuelson 1985

*No part of this book may be reproduced in
any form without permission from the publisher,
except for the quotation of brief passages
in criticism*

Library of Congress Cataloging in Publication Data

Llewellyn, G. E. J. (Graeme Ernest John), 1944—

*Economic forecasting and policy—the international dimension.
(International library of economics)*

Bibliography: p.

Includes index.

1. Economic forecasting. 2. Economic policy. 3. International economic relations.

I. Potter, Stephen, 1940— II. Samuelson, Lee. III. Title. IV. Series:

ILE.

HB3730.L56 1985 338.9 84-27659

British Library CIP data also available

ISBN 0-7102-0600-3

Preface

We were motivated to write this book by the evident increased difficulty of managing economies in recent years, and by the feeling that our own experience might enable us to provide a perspective on some aspects of current problems that may not always be available in national discussions of economic matters.

The book covers a range of topics, from international economic concerns to general questions of economic policy-making and more technical issues of economic forecasting. This reflects the view that effective macroeconomic management needs to draw upon, and blend appropriately, a wide range of techniques and skills. We have various audiences in mind, and recognize that any individual reader may not be equally concerned with all chapters. One target group consists of interested general readers with a taste for practical applied economics; another consists of those in business or government who are involved, directly or indirectly, in the analysis and assessment of the international economic outlook, or in the formulation of economic policies; we also expect the book to be of interest to advanced undergraduate and graduate students who, having followed courses in, for example, macroeconomics or international economics, are seeking to deepen their knowledge of recent economic history and to gain practical insights into how economic analysis can be applied to current issues.

It will be clear that we would have been in no position to write the book had we not spent a major part of our professional lives in the OECD Secretariat. We owe a general debt of gratitude to the Organization, to colleagues past and present, and to a large number of national officials with whom we have been brought into contact by our OECD work. But this book is in no sense officially-sponsored. We have written it in our (scarce) spare time. Views expressed are ours, and do not necessarily correspond to those of the Organization or its Member governments.

Some more specific acknowledgements are also needed. A particular debt is owed to John Fay, who made extensive comments on the book as a whole, and helped provide an overall balance. And we were fortunate to be able to draw upon discussions with Emile van Lennep of a number of the key postwar economic policy episodes.

Chris Higgins and Flemming Larsen were a continuing source of stimulation and encouragement, commenting critically on the drafts of many chapters. Gordon Hughes, David Henderson and Gerry Holtham helped at various stages. Michael Feiner and Flemming Larsen contributed importantly to chapter 4. Derek Blades helped us with parts of chapter 5. Haruhito Arai, Marie-Odile Louppe, Yoshiro Nakajo, Andras Racz and Peter Richardson contributed important parts of chapter 6. Nick Vanston assisted with chapter 10. Byron Ballis helped on many parts of the book. We are also grateful to Serge Devos, Basile Gondicas, Eliane Betout-Mossé and Jean-Pierre Tuveri for help on specific points.

Data for the tables and charts were prepared by Anick Bouchouchi, Raoul Doquin de St. Preux, Anne Keeling and Chantal Nicq, and the charts were drawn by Michel Houle. Marie-Blanche Koromzay compiled the index.

The whole was typed with unfailing cheerfulness and accuracy by Ruth Mariette, assisted at various times by Priscilla Field, Angela Gazaroglu, Anne Hamilton and Virginia Kurlansky.

An earlier version of parts of chapters 3, 4 and 6 has appeared in OECD's twice-yearly publication, *OECD Economic Studies*. We acknowledge permission from the Organization to re-use this material.

The text can be taken to reflect developments through 1983, the latest year for which data were available at the time the book was finalized.

Paris, September 1984

John Llewellyn
Stephen Potter
Lee Samuelson

Contents

Preface	ix
Part I Policy-making in an open world economy	1
1 Introduction: prosperity and recession	3
2 The contribution of policy in the 1950s and 1960s	10
3 Policy successes and failures since the early 1970s	27
4 The influence of international linkages	49
5 The need for monitoring and forecasting	73
6 The dependability of economic forecasts	93
Part II International economic forecasting	121
7 Approaches to economic forecasting	123
8 Developing a system for international forecasting	142
9 The INTERLINK system	161
10 Making international economic forecasts	187
Part III The international dimension in improving economic performance	207
11 Recent approaches to policy	209
12 International cooperation in economic policy-making	233
13 Some concluding thoughts	257
Notes	264
Bibliography	269
Index of names	276
Index of subjects	278

Tables and charts

Tables

1.1	Economic performance, major epochs, 16 major countries	6
2.1	Inflation in the United States	15
2.2	Effects of fiscal policy on GNP	23
3.1	Discretionary changes in general government financial balances	32
3.2	OPEC import volume and current balance	35
3.3	Arithmetic contributions to change in real GNP in seven major OECD countries	36
3.4	General government net lending	37
3.5	Real labour costs relative to real national income	38
3.6	Real interest rates	42
3.7	Estimates of main forces acting on the OECD economy	43
3.8	Consumer prices	45
3.9	Real labour costs relative to real national income	45
4.1	External assets and liabilities of six OECD countries	52
4.2	Peak-to-peak output growth	55
4.3	Changes in budget balances, 1979 to 1982	71
6.1	Forecast and actual OECD real GNP growth	99
6.2	Analysis of single-country forecasting errors: year-ahead real GNP	106
6.3	Fiscal impact measure, nine OECD countries	110
6.4	Forecasting errors for OECD area GNP deflator	117

Charts

2.1	Year-to-year GDP growth of 16 economies	25
3.1	Cyclical fluctuations in industrial production and commodity prices	33
3.2	Macroeconomic imbalances	40-1

6.1	Forecast and actual OECD real GNP growth, and errors	102
6.2	Scatter diagram of forecast and actual OECD real GNP growth	103
6.3	Single-country GNP forecasting errors	105
6.4	Single-country inflation forecasting errors	116
6.5	Forecasting errors for OECD real GNP and inflation	118
9.1	The INTERLINK system	168

Part I
Policy-making in an open world
economy

1 Introduction: prosperity and recession

Until a few years ago, it would have been understandable for most people in the advanced industrialized world, including most policy-makers, to consider rapidly-growing prosperity the natural order of things. For people in their mid-fifties today, who entered the labour force after the second World War, the dominant memory of economic matters is of the quarter-century of rapid growth from the late 1940s. Over this period, average living standards rose to an unprecedented degree. But for people now in their mid-twenties, whose awareness of economic events is concentrated on the last decade, things may be viewed very differently. A high standard of living tends to be taken for granted. But the overriding impression, particularly in Europe, may be of some of the apparent consequences of recent slow growth, including the increased difficulty of finding a job. And whereas the middle-aged person would be likely, perhaps to an exaggerated extent, to attribute high and rising living standards to the success of government policy, the younger one, more influenced by the recent climate of opinion, is quite likely to believe that today's problems can largely be laid at the door of excessive government involvement in the economy.

Rapid economic growth has not always been the norm. Between 1870 and 1913, 16 of the largest economies of the world grew on average by about $2\frac{1}{2}$ per cent per year (Table 1.1). There was, naturally, significant variation both between countries and from year to year, but this average figure provides a reasonable overall summary. Considering then the next epoch, the level of real GDP in these countries in 1950 would seem, when taken in relation to the figure for 1913, to imply an average rate of growth that was rather lower, at not quite 2 per cent per year, although of course the significance of this figure is somewhat dubious, as there had been two world wars in the interim. By contrast, average GDP growth for

the same group of countries proceeded at nearly 5 per cent per year over the post-war epoch 1950 to 1973, virtually twice as fast as had previously been seen.

Employment grew in all three epochs. Although there were differences from one epoch to the next, these were less than the differences in the rate of growth of output, so that, as a matter of simple arithmetic, labour productivity growth, and thereby the growth of the standard of living of the workforce and indeed the population as a whole, fluctuated considerably. Again, the most dramatic change took place between 1950 and 1973. Unemployment was far lower on average in this period than it had been earlier; and those who were unemployed were generally better protected by social insurance programmes.

The inflation differences between the three epochs are particularly striking. Between 1870 and 1913 there was virtual price stability, prices rising on average by less than $\frac{1}{2}$ per cent per year. But over the period 1913 to 1950 considered as a whole prices rose very rapidly, at nearly 9 per cent per year on average. This average figure masks quite disparate movements within the period, however – sharp rises during both world wars, with an actual fall in the price level in between. During the third epoch, from 1950 to 1973, inflation proceeded at an intermediate rate, of just under 4 per cent per year on average.

Between 1870 and 1913 overall real living standards grew on average by a little under $1\frac{1}{2}$ per cent per year. And between 1913 and 1950 the growth of living standards may have been slightly slower than this. The problems in providing a reliable quantitative estimate are considerable, because the period includes two world wars, which brought with them large changes in technology, patterns of demand and the structure of production. On the best estimates available, which rely heavily on terminal levels, it seems that real per capita income may have grown by about $1\frac{1}{4}$ per cent per year. At such rates of growth, living standards double about every fifty years. The average grandparent, recalling at retirement the real wage at which he or she started work at fifteen, would see his or her grandchild start work at a real income that was about twice as high. During the epoch from 1950 to 1973, however, productivity and general living standards grew much faster – at about $3\frac{3}{4}$ per cent per year. The phenomenon of compound growth being what it is, at that sort of rate living standards take less than twenty years to double;

and the starting income of the average new entrant to the labour force is about six times higher than that of his or her grandparents.

By the late 1960s, the OECD world had seen two decades of spectacularly successful economic performance. Furthermore, it seemed to many that, short of war or extreme natural disaster, little of economic significance was likely to go wrong. Much of the credit was attributed to economic policy. The problems of ensuring a satisfactory, and indeed continually improving, performance from the modern mixed economy seemed to have been largely overcome. Students of economics were taught, and many people believed, that through the correct application of economic policy it was possible not only to achieve full employment, but also to iron out all but the most minor fluctuations in activity. Inflation was generally not thought a serious problem, and such difficulties as manifested themselves through the balance of payments could usually be dealt with relatively straightforwardly.

The comparatively poor performance of the last decade has come as something of a shock, therefore. First of all, growth has dropped back to a modest $2\frac{1}{4}$ per cent rate on average, little better than during the 1913 to 1950 period, and less than in the 1870 to 1913 epoch (Table 1.1). Employment has grown, but not sufficiently to prevent unemployment from rising significantly. Furthermore, the growth of living standards has generally slowed down, to its more customary historical 1 to 2 per cent rate. And throughout, most economies have proved more inflation-prone than before. What were the main reasons for this deterioration in economic performance? With the benefit of hindsight, it seems clear now that, during the high growth epoch, a number of economic clouds were gathering on the horizon.

Inflation was building up, albeit slowly and from rates that today would be regarded as low. The world energy balance was changing, with the United States switching from being a net exporter to a net importer of oil and the net energy imports of the OECD area as a whole growing rapidly. The system of pegged exchange rates was becoming harder to maintain. There was a strengthening feeling, hard to substantiate but no less real for that, that the supply side of OECD economies, particularly those in Europe, was becoming less responsive.

Other changes were occurring too, although in the prevailing environment of virtually full employment these did not seem to

6 Part I Policy-making in an open world economy

Table 1.1. Economic performance, major epochs, 16 major countries^a

	1870-1913	1913-1950	1950-1973	1973-1983
1. Real GDP growth, per cent per year	2.5	1.9	4.9	2.3
2. Total employment growth, per cent per year	1.1	0.7	1.2	0.4
3. Productivity growth, per cent per year ^b	1.4	1.2	3.7	1.9
4. Unemployment rate, per cent		7.8 ^c	2.6	5.3
5. Capital stock (non-residential) growth, per cent per year ^d	2.9	1.7	5.5	4.0
6. Export growth (merchandise volume) per cent per year	3.9	1.0	8.6	4.8
7. Consumer price increase, per cent per year	0.4	8.9	4.1	9.3

^a The figures are unweighted arithmetic averages of the figures for Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom and United States. These countries account, at present weights, for 95 per cent of the total output of the OECD area. Data for the period 1870 to 1973 are taken from Maddison (1982). Data for the period 1973 to 1983 are taken from OECD sources.

^b Figures for the growth of output per head of population, not shown here, are very similar.

^c 1926-1938.

^d United States, Japan, Germany, France, United Kingdom, Italy and Canada only.

present any insuperable problems. Important new industrial poles emerged not only within the OECD but also in the newly-industrializing countries of South America and the Far East. International trade grew rapidly – about twice as fast as GNP – so that OECD economies became progressively more intertwined, and thereby progressively more affected by developments in partner countries. Financial integration too proceeded apace, reinforcing international interdependence. And in virtually all countries the

government sector grew continually in relation to the economy as a whole.

While this description is a stylization, most of these elements are characteristic of most OECD countries. They have generally figured in discussions of the problems of conducting economic policy in OECD countries over the last decade or so. A number of these factors – and perhaps others too – came to a head in the early 1970s with the 1972-73 commodity price boom, the 1973-74 quadrupling of the price of internationally-traded oil, and a dramatic increase in nearly all countries in the rate of inflation.

There followed a decade of change. This decade saw not just the first but also a second great oil shock, a massive rise and then an even larger fall in non-oil commodity prices, large swings in countries' external current accounts, volatile exchange rates, stubbornly high inflation, high public sector deficits, record rates of bankruptcies, near-financial collapse of several big developing countries, a resurgence of protectionism, prolonged OECD recession, and high and rising unemployment.

It is therefore perhaps not surprising that this became a decade of disillusionment, including disillusionment over the ability of economic policy in general to bring forth an adequate performance from the modern economic system. Earlier optimism on the part of national economic policy-makers about their ability to control their national economic destiny seemed to fade. The system of pegged exchange rates could no longer be maintained. The role and the effectiveness of the two main levers of macroeconomic policy – fiscal and monetary policy – began to be fundamentally reappraised. Rigorous attempts were made to check, and then reverse, the growth of the government sector. And in a number of countries policy-makers, after three decades of apparent belief in the central role of aggregate demand policy, seemed to swing towards believing that there was little if anything that such policy could or should do, apart from seeking to provide a framework of financial stability. 'Fine tuning' of demand was dismissed, the 'automatic-stabilizer' element of fiscal systems fell into disrepute, and simple non-discretionary rules were tried instead.

Some at least of this response may have been an over-reaction. The balanced view may be that, while policy and policy-makers cannot take all the credit for everything that went right over the quarter century after World War II, neither should they take all

of the blame for what went wrong subsequently. In matters of economic performance it pays to beware the single all-embracing explanation. In the case of the 1970s deterioration in economic performance it is almost certain that the origins have been both numerous and complex, with the relative importance of the various causes differing both from period to period and from country to country.

A key question is whether the epoch from 1950 to 1973 will prove, in retrospect, to have been unique, or whether it will be possible for economies to perform in that sort of way again. This book does not attempt to consider the whole range of possible reasons for the deterioration in economic performance over the last decade, or all the elements that will determine economic performance in future epochs. Nor does it discuss the particular problems of the developing countries and the centrally-planned economies. To cover all these issues would be a mammoth undertaking, and even provisional answers are probably years away.

Rather, the book concentrates on one particular, but apparently important, reason for the deterioration in the performance of the Western industrialized world over the last decade. This is that, collectively, national economic policies did not deal adequately with influences that were transmitted internationally. Some of these were shocks originating within OECD countries. Others came, at least proximately, from the non-OECD world. But all were rapidly transmitted among the very open OECD economies. This made policy-making more difficult, and perhaps also made policy appear less effective. And this state of affairs could well continue. Openness of the international trading and financial system is the modern-day environment; it goes far in underpinning current standards of living, but at the same time it carries with it an increasing vulnerability to external shocks.

However, it may be possible to do something about these difficulties. It may well be that more attention should, and can, usefully be paid to devising coordinated policy for the OECD countries as a group. And because, inescapably, policy has to be made on the basis of projected, rather than actual, conditions, this implies in turn putting effort into improving further the accuracy and quality of the international and thereby national analysis and forecasts upon which policy has to be based.

This book therefore considers first the major successes and

failures of policy over the post-war period. It then explains how international forecasts are currently made. Various ways are suggested in which it may prove possible to improve national economic forecasts through improving international forecasts, and achieve better national policy through more international cooperation in determining national policy settings. The aim at no point is to suggest that any country should take action that is not in its national self-interest. Rather, the point is that, in many situations, it will be possible for countries to take individual actions which, taken together, lead to a better outcome, for all together and each separately, than would result from non-cooperative policy-making.