1 Introduction

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It has long been recognized that the openness of a national economy – high participation in international trade and capital flows – is a mixed blessing. It offers the opportunity of gains from trade, both international and intertemporal, but it subjects an economy to additional shocks. Openness also implies some additional constraints for stabilization policy. The precise nature of these external constraints is not always clear, however, and there is considerable uncertainty about their importance and their dependence on the exchange rate regime.

The collection of essays in this book represents an attempt to clarify the nature of external constraints and to examine their importance for macroeconomic policy in Western Europe. West European economies are far more open to international trade than either the United States or Japan. In addition, both the interwar and postwar periods exhibit cases in which macroeconomic policy has clearly been affected by external considerations. The devaluations of the 1930s, the stop-go cycles of the 1950s and 1960s, the policy reversals of the 1970s and early 1980s, and the EMS experience are all examples of the important role of external factors in European macroeconomic policy. Finally, as the European Community countries are now engaged in a process of economic and monetary unification, this is an opportune time to reexamine their past experience with macroeconomic policies and the lessons it may have to offer for the future.

1 The nature of external constraints

Under fixed exchange rates with limited capital mobility, as for example in the 1950s and 1960s, economists and policy-makers had a relatively clear idea of the nature of external constraints. A government trying to expand unilaterally would soon deplete its foreign exchange reserves and would be forced to adjust through a reversal of the original expansion and

possibly with a politically damaging devaluation. The 'stop-go' cycles of the 1950s and 1960s are well documented for many European economies, including Britain and France.

The situation in the 1970s and 1980s differed markedly from this stylized version of external constraints that have to do with foreign exchange reserves in a regime of fixed exchange rates. The commitment to defend the exchange rate was looser in the last two decades. On the other hand, private capital flows have been far more important and free than in the 1950s and 1960s, and the development of the Eurodollar market allowed many countries to borrow much more easily and on good terms to finance balance of payments deficits. Yet, despite these developments, policy-makers in Europe still felt constrained by external considerations, and there were many policy reversals following sharp deteriorations in the balance of payments. Britain and Italy in the 1970s and Germany and France in the early 1980s are among the best-known such examples.

This suggests that there are external constraints in addition to those that operate through foreign exchange reserves in a regime of fixed exchange rates. Even in regimes of floating exchange rates with high capital mobility, the currency depreciation that will accompany any attempt at unilateral monetary expansion may overshoot the medium-run equilibrium exchange rate. This will produce a higher rise in inflation than in a closed economy, as rises in import prices affect domestic wage-setting and feed into the prices of domestic goods. Thus, in an open economy with high capital mobility, flexible exchange rates change the trade-off between inflation and unemployment. Governments may therefore be less willing to use monetary policy to counteract shocks that increase unemployment. But this cannot be the whole story, since they could alternatively resort to expansionary fiscal policies, which with no monetary accommodation would cause an exchange rate appreciation. That improves the trade-off between inflation and unemployment relative to a closed economy, although it worsens possible trade-offs between unemployment and the current account. To summarize, under flexible exchange rate regimes and high capital mobility, we have a different, much looser, concept of external constraints. In a relatively open economy, an aggregate demand expansion may create either a worse inflation problem or a worse current account problem, depending on the policy mix, in comparison with a relatively closed economy.

The third concept of the external constraint operates in the longer run: the intertemporal budget constraint. In a world of high capital mobility, macroeconomic policies are eventually constrained by the solvency requirement that the value of external debt should not exceed the present discounted value of future current account surpluses, net of interest

payments. This means that, ultimately, real external debt must rise at a rate lower than the real interest rate, or that debt as a proportion of GDP must be rising at a rate lower than the difference between the real interest rate and the growth rate of GDP. A stronger (steady-state) version of this solvency requirement is that the ratio of net foreign debt (or external assets) to GDP must eventually be stabilized. In other words, an economy must ultimately be in a position to service its external debt, without borrowing at a rate different from the growth rate of GDP. This sustainability or solvency requirement is the third concept of the external constraint on macroeconomic policies.

In conclusion, one can distinguish at least three types of external constraint on macroeconomic policy. The first is the traditional liquidity constraint operating in fixed exchange rate regimes with low capital mobility. The second is the different trade-off between unemployment and inflation and unemployment and the current account in relatively open compared to relatively closed economies. This applies under floating exchange rates with high capital mobility. Finally, there is the sustainability or solvency constraint that the value of external debt should not, ultimately, exceed the present discounted value of future current account surpluses, net of interest payments.

2 External constraints in theory and practice

Chapters 2 to 5 deal with the various aspects of external constraints and offer overviews of the European experience in both the interwar and the postwar periods.

In Chapter 2, Michael Artis and Tamim Bayoumi examine the extent of international financial integration and its consequences for the current account. The authors argue that, notwithstanding the closer links among capital markets in recent years and the associated increase in short-term capital mobility, the evidence suggests that overall net flows of national savings and investment are still markedly insular when compared with the predictions of models with full capital mobility or with experience under the gold standard. The principal explanation that they suggest is that the authorities treat the current account balance as an objective of national policy and act to offset fluctuations in the savings–investment balance. Exchange rate risk may also play a role. The authors argue, however, that the closer integration of capital markets should make the current account more of a residual factor in agents' decisions and may reduce its status as a policy objective. Indeed the higher current account imbalances of the 1980s can be seen as a step in this direction. Does this mean that we should abandon the first and second concepts of the external constraint

referred to above and be concerned solely with national solvency? Not necessarily, the authors maintain. There is still an important function of current account statistics for the policy authorities, as they indicate the net effect of saving and investment decisions, the policies that affect them, and the net contribution of countries to the world pool of savings.

Chapter 3 by David Currie and Paul Levine is solely concerned with the implications of the national solvency constraint. It deals with a single open economy in which the real interest rate exceeds the steady-state growth rate, and it elucidates the implications for the conduct of fiscal policy of the requirement that both the government (domestically) and the nation (internationally) must be solvent. Solvency is defined by the requirement that the ratios of public and external debt to GDP should remain constant. The paper treats the government as an agent optimizing intertemporally in a neo-Keynesian economy, and it examines the role of reputational issues. The authors analyse both the situation in which the government has an ambitious output (unemployment) target in a deterministic context and the case of stabilization in the face of random shocks. A possible objection to the time-consistent solution is that there may be an incentive to 'defer solvency' by postponing the stabilization of the relevant asset/GDP ratios to some time in the future. The authors argue that such an incentive does not exist if the policy-makers know that solvency must be imposed sometime in the future.

In the type of model presented by Currie and Levine the national (external) solvency constraint is distinct from the government solvency constraint, because in this type of model the private sector is not viewed as choosing its savings in an intertemporally optimal fashion. Thus it is not enough for the government to be solvent, as private consumption behaviour may be such as to make the private sector, and therefore the national economy, insolvent. This is in sharp contrast to intertemporal models of private sector savings (e.g. Blanchard–Yaari–Weil), in which the private sector respects its own solvency constraint. This type of model is analysed for the case of Greece, in Chapter 9, by Alogoskoufis and Christodoulakis. The implications of the two models can be reconciled if the wealth elasticity of private sector savings in the Currie–Levine type of model is high enough. In that case, even though the private sector is not modelled as forward-looking, the high response to its wealth suffices to ensure its solvency.

The next two chapters, by Eichengreen on the 1920s and 1930s and by Alogoskoufis and Martin on the 1970s and 1980s, focus on the shorter-run types of external constraints. They look at the exchange rate regimes and their implications for inflation–unemployment and unemployment–current account trade-offs.

In chapter 4, Barry Eichengreen points out that the new conventional wisdom on the macroeconomics of the 1930s focuses on the external constraint, in particular the propagation of the Great Depression from the United States to Europe in a world of high capital mobility and fixed exchange rates. Only by abandoning the gold standard (fixed exchange rates), and thus relaxing the external constraint, did it prove possible for European economies to recover from the Depression. Eichengreen argues that devaluation was a necessary precondition for recovery because reflation without devaluation required international cooperation, which was not forthcoming mainly because of different views among policy-makers about the operation of the economy. Using a sample of some three dozen countries, the author analyses the effects of devaluation. He finds the policies quite effective, although he also stresses their costs in terms of higher uncertainty about nominal and real exchange rates which appear to have disrupted the smooth operation of the price mechanism. He also contrasts the 1930s, a decade of managed exchange rates, with the period of floating in the 1920s. He finds that, although exchange rate management reduced the variability and unpredictability of short-run nominal and real exchange rates, over longer periods intervention appears to have aggravated real exchange rate uncertainty and interest rate volatility.

Chapter 5, by George Alogoskoufis and Christopher Martin, focuses on external constraints on European unemployment in the 1970s and 1980s. They argue that many of the stylized facts about European unemployment in the 1970s and 1980s and the differences between Europe and the United States can be explained by macroeconomic policies and their interaction. They present a family of models of unemployment in interdependent open economies. These focus on monopolistic competition in the output market and wage-setting by monopoly unions that may operate at different levels of centralization. They argue that their most general model can explain the different unemployment experiences in Europe and the USA, in terms of the more cautious macroeconomic policy stance in the large European economies following both the first and second oil shock. Furthermore, this explanation is consistent with the evolution of other macroeconomic variables such as inflation, real interest rates, and primary-commodity prices. The authors suggest that external constraints, in the form of worse inflation–unemployment and unemployment–current account trade-offs, may have been responsible for the less expansionary macroeconomic policy stance in Europe. The tighter European external constraints are attributed to a higher degree of openness, asymmetries in the international monetary system, and the preferences of European policy-makers for stable exchange rates reflected

in EEC institutions, combined with aversion to inflation and current account deficits in Germany.

3 Country studies

In Chapter 6, Daniel Cohen and Charles Wyplosz develop a theme similar to that of Alogoskoufis and Martin. Their focus is on France and Germany in the EMS. Their model emphasizes two channels through which real exchange rates have an impact on policy-making: inflation and the trade account (output). For example, an appreciation lessens inflationary pressure, but at the same time brings about a worsening in the trade account and a reduction in aggregate demand and output. The authors show that for two closely integrated economies like France and Germany, the trade-off depends on the relative size of these two effects, both between the two economies themselves and also *vis-à-vis* the rest of the world. In an empirical investigation, they find some evidence that in Germany and France the trade balance is quite sensitive to the intra-EMS effective exchange rate, but not to the extra-EMS rate. The opposite seems to be the case with inflation. They use these findings to suggest that French and German policy actions have been dominated by the need to avoid disrupting the trade balance (and with it output and employment). Thus both countries seem to have unexploited gains in inflation–output trade-offs, gains which could be reaped through beggar-thy-neighbour policies *vis-à-vis* the rest of the world. Monetary union would remove this inefficiency, the authors argue, and this could be quite desirable if the US dollar were to depreciate further.

In Chapter 7, Charles Bean deals with the external constraint in the United Kingdom. The author first examines the historical record, highlighting the central role played by foreign asset income in ensuring the strong current account performance during the Victorian and Edwardian eras, and the role of the two world wars in eliminating this foreign asset buffer. While trade performance actually improved in the period after the world wars, this only partly offset the fall in interest income. At the same time, British economic policy-making has apparently been constrained by external considerations. In an empirical investigation, the author does not seem to find a very good matching between periods of external pressure and periods of a strongly rising supply price of foreign borrowing. For most of the sample period the external constraint seems to have been little more than an intertemporal solvency requirement. Bean then assesses the reasons for the sharp deterioration in the British current account in the late 1980s. He argues that financial deregulation and optimistic permanent income expectations are primarily responsible for the fall in

savings. As both these factors are likely to be largely temporary, implying that the current account deficit should be self-correcting, should the government intervene to tackle the current account deficit? Bean stresses that, if the government does have some reason for influencing the national savings rate, it should use fiscal rather than monetary policy, as financial deregulation is a real shock despite its monetary consequences.

The Dutch experience is examined by Hugo Keuzenkamp and Frederick van der Ploeg in Chapter 8. The emphasis is on the relevance of the exchange rate policy of closely pegging to the Deutschmark, tax-smoothing, consumption-smoothing, and the apparent lack of capital mobility. The authors conclude that the latter may be due to legal constraints on foreign investment by pension funds, but more generally is an indication of the low importance of tax and consumption-smoothing in the Netherlands. They view the two external constraints of a rigid guilder–Deutschmark rate and the high association of investment with domestic savings as self-imposed.

George Alogoskoufis and Nicos Christodoulakis in Chapter 9 examine the Greek experience in the 1980s and assess the options for stabilization. Among the countries studied in this volume, Greece seems to be the only one for which the external constraint as a solvency constraint is likely to be binding for macroeconomic policy in the 1990s. Successive governments in the 1980s have pushed up government deficits. The authors present a model of optimal private sector savings and suggest that to the extent that the private sector is forward-looking and can engage in consumption-smoothing, there is no separate external constraint. If the government respects its own intertemporal solvency constraint, then the external debt to GDP ratio will also be stabilized. They examine three options for public and external debt stabilization in Greece: a fall in government expenditure, a rise in taxes, and a rise in steady-state seigniorage. Their estimates of the money–demand function suggest that steady-state seigniorage is maximized at inflation rates of the order of 20% currently prevailing in Greece. Thus a rise in steady-state inflation is likely to result in a reduction in seigniorage revenue and cannot be used to stabilize the external debt to GDP ratio. Of the other two options, stabilization of the public debt to GDP ratio at its current level through a rise in taxation will result in a much higher equilibrium external debt to GDP ratio than a similar stabilization through a reduction in government expenditure. The authors suggest that for the public and external debt to GDP ratios to be stabilized, the primary deficit must be set to zero.

The Spanish experience is examined in Chapter 10 by Juan Dolado and José Viñals. The authors argue that, while the true external constraint of

the economy is a long-run constraint in the absence of distortions and market imperfections, it nevertheless may be rational for governments to monitor the short-run evolution of external accounts for the purpose of avoiding future difficulties. Moreover, whenever such distortions and imperfections are important, governments may even be justified in setting specific external targets. They argue that in Spain over the last twenty years there have been clear and unambiguous examples of major policy changes following unfavourable developments in the external accounts. They also present cointegration tests suggesting that the Spanish economy is at present more than respecting its external solvency constraint. The authors warn against complacency, especially in view of the elimination of capital controls by 1993, and argue in favour of further fiscal restraint and supply-side policies. They also present tentative calculations of real exchange rates and output gaps consistent with an equilibrium balance of payments in the longer run.

Søren Bo Nielsen and Jørgen Søndergaard consider the experience of Denmark in Chapter 11. Denmark has a long history of current account deficits, and it belongs to the small group of heavily indebted OECD countries. The authors examine the historical record and a variety of possible reasons for the rising external indebtedness of Denmark. These include exogenous and policy shocks as well as structural characteristics of the Danish economy, such as the exchange rate regime, the tax system, and capital, product and labour markets. The authors remain eclectic to the end, refusing to endorse any single explanation. They argue that the external constraint has been a soft constraint, but that it is likely to become tighter as a result of further integration in the EEC.

The studies presented in this volume underline the importance of the three types of external constraints for macroeconomic policy in Europe. One of the questions that arises is whether these constraints are likely to become tighter or looser following the process of economic and monetary integration in the EEC. The constraints relating to inflation–unemployment and unemployment–current account trade-offs are likely to be relaxed, if the conclusions of Alogoskoufis–Martin and Cohen–Wyplosz are correct. On the other hand, Artis–Bayoumi, Keuzenkamp–van der Ploeg, and a number of other studies in the volume suggest that at the present stage of financial integration, domestic investment is still highly correlated with national savings. This implies that the long-run external constraint is still tighter than just a solvency constraint. To the extent that there is further financial liberalization in Europe, however, we may see a relaxation even of longer-run external constraints. In any case, we find it unlikely that the considerations that now take the form of the external constraint will disappear completely, even with full economic and

monetary union. For example, the question of solvency of fiscal authorities in the European economies, which under the current arrangements often manifests itself as an external constraint, will still be important after economic and monetary union, although evidently in a different way.

2 Global financial integration and current account imbalances

MICHAEL ARTIS and TAMIM BAYOUMI

1 Introduction

The last decade has witnessed a marked increase in the degree of current account imbalances among the industrial countries. At the same time, it is evident that the capital markets of these same countries have become more closely linked to each other. The coincidence of these two observations sets the agenda for this chapter, which is the extent of global financial integration and its consequences. In particular, in view of the significance traditionally attached to current account balance as a policy objective and the role that current account balance has acquired in the exercise of international economic policy coordination, the chapter enquires whether the new circumstances brought about by capital market integration justify these policy emphases.

The plan for the rest of the chapter is as follows. Section 2 looks at some definitions associated with the balance of payments. Section 3 discusses the determination of the external current account balance under various conditions, and the role of international capital market integration in that process. Section 4 examines some evidence on the question of whether capital markets are highly integrated. In Section 5 the same issue is considered from a different perspective, asking whether consumption-saving choices have been less constrained in the recent period, as they should have been if capital markets have become more efficient. The main conclusions are summarized in Section 6.

2 Definitions

The basic definition of the balance of payments in focus here is, as explained below, that provided by a rearrangement of the national accounts definitions as the residual of savings and investment. To clarify this, recall the following definitions of (i) the current account of the balance of payments and (ii) the gross national product