



NORTH-HOLLAND

North American Journal of
Economics and Finance 11 (2000) 173–189

THE NORTH AMERICAN
JOURNAL OF
**ECONOMICS
AND FINANCE**

Fix or flex? Alternative exchange rate regimes in an era of global capital mobility

Thorvaldur Gylfason^{a,b,c,*}

^a*University of Iceland, 101 Reykjavík, Iceland*

^b*CEPR (Centre for Economic Policy Research), London, England*

^c*SNS—Center for Business and Policy Studies, Stockholm, Sweden*

Received 1 June 2000; received in revised form 1 August 2000; accepted 1 August 2000

Abstract

This paper discusses the pros and cons of fixed versus flexible exchange rate regimes under perfect capital mobility from a European perspective. Special attention is given to the exchange rate policy problems of Iceland and Norway and to the linkages between their dependence on natural resources and their choice of exchange rate regime. The relevance of the advent of a common currency in Europe for the Western Hemisphere is also discussed. © 2000 Elsevier Science Inc. All rights reserved.

JEL classification: F31; F33; F36

Keywords: Exchange rate regimes; Capital mobility; Dutch disease

1. Introduction

It is not possible, and never has been, to claim superiority for either fixed or flexible exchange rates once and for all. Sometimes fixed rates work well, sometimes flexible. This is why some nations choose to fix the exchange rates of their currencies in various ways, and

* Tel.: +1-354-525-4533 or 4500; fax: +1-354-552-6806.

E-mail address: gylfason@hi.is (T. Gylfason).

¹ Research Professor of Economics, University of Iceland; Research Fellow, CEPR (Centre for Economic Policy Research), London, and Research Associate, SNS—Center for Business and Policy Studies, Stockholm. The author is indebted to the editor, Sven Arndt, as well as to Eduard Hochreiter and Arne Jon Isachsen for helpful comments on earlier drafts. However, the views expressed in the paper should not be attributed to them.

others do not. This makes perfect sense: the choice depends on time and circumstance. This paper examines some pertinent considerations.

2. Benefits and costs

2.1. *An example from Iceland*

Albeit unfamiliar to most, Iceland is a case in point. From 1927 until 1960, the Icelandic economy was poorly managed, to put it mildly. As in Ireland next door, and partly, perhaps, for comparable postcolonial reasons,¹ the economic policy regime in Iceland was inward-looking and myopic, strict import protection and foreign exchange controls were the order of the day, as were export subsidies aimed mostly at the fishing industry which accounted for an overwhelming share of merchandise exports. To make matters worse, the state banks were instructed to keep the fishing industry afloat despite mounting inefficiency and recurrent heavy financial losses.

Against this background, therefore, it made good sense in the 1960s to devalue the króna a few times as was done, because the exchange rate realignment was an essential ingredient of the radical liberalization of the economy, ten years after similar liberalization was undertaken in much of the rest of Europe. The abolition in 1960–1961—virtually overnight!—of export subsidies that had absorbed almost a half of the government budget and a radical reduction in import tariffs and exchange controls were needed to accompany the concurrent devaluation to keep the balance of payments in reasonable equilibrium. The funds that were released by the abolition of export subsidies were channeled to education, health care, and social security—and also, alas, to increased farm subsidies. The main point here, however, is this: without devaluation, these economic reforms, the most sweeping reforms ever undertaken in one swoop in the history of the republic, would have triggered an uncontrollable deficit in the balance of payments and turned the economy upside down. Had an attempt been made instead to achieve a comparable realignment of the real exchange rate through domestic fiscal, monetary, and incomes policies on top of the radical structural reforms without devaluation, it would almost surely have been futile.

It also made good sense in the late 1980s to try to keep the exchange rate of the króna fixed (to a basket of trade-weighted currencies), because the circumstances had changed: at that time the battle against inflation was the first priority of economic policy. Experience seems to show that it is as a rule impossible to stop high inflation without nailing down the exchange rate at least as long as it takes the inflation to subside (Dornbusch & Fischer, 1986), or that at least was the conventional wisdom before New Zealand started with inflation targeting in 1989. True, the real exchange rate of the króna increased for a while, which hurt both the export and import-competing industries, and this was not good for an economy that was, and remains, far too closed for its size,² but that was the price that had to be paid for successful disinflation.

There is, however, hardly any doubt that the devaluation of the currency in the 1960s helped pave the way for the inflation of the 1970s and 1980s, when inflation peaked at more than 80% in 1983. Yet, it would be unwise to blame the escalation of inflation on the

devaluation strategy per se. Rather, the problem was—and it was, indeed, a serious problem—that the devaluation was not accompanied by sufficient fiscal and monetary restraint.

The fiscal part of the problem was masked by a system of budgetary accounts in which the central government budget was generally in reasonable balance, at least *ex ante* if not *ex post*, while the consolidated budget of the public sector as a whole, broadly defined, would have shown large deficits had the books been kept the way they should. The lax monetary and exchange rate policies stemmed in part from the perceived need to keep the fishing industry afloat through the banking system as well as from severe weaknesses in the structure and functioning of the mostly state-owned and state-operated banking system (central bank, commercial banks, and investment funds). It should have been possible to adjust the exchange rate of the króna without losing control of inflation, for the real exchange rate of a currency, after all, is a relative price. But let us leave all that aside here.

The main point here is that, by and large, the adjustable-peg regime served Iceland rather well under the prevailing circumstances. The peg was indeed adjustable: the exchange rate was adjusted a few times in the 1960s to facilitate the big push for liberalization, but then it was kept fixed from the end of the 1980s onwards to facilitate the process of disinflation. There were instances, true, where the government missed a good opportunity to revalue the króna in order to cool off the economy following a good cod catch or an upsurge in fish prices in world markets, but generally there was not much fear of importing inflation from abroad via the fixed exchange rate, partly because inflation has hardly ever been higher among Iceland's main trading partners than in Iceland. The appropriateness of the fixed exchange rate regime itself was thus hardly in doubt. It was the only game in town.

The fact that the par value of the króna had been adjusted now and then was generally not viewed as an argument against the system as such. In fact, the króna was formally devalued 24 times between 1972 and 1989, compared with five devaluations during 1950–1971. Understandably, therefore, the International Monetary Fund classified the Icelandic exchange rate regime as a managed float for a time in the 1970s and 1980s. In public debate, however, there were no serious calls for alternative arrangements, not until the mid-1980s. Before the disinflation of the 1990s, floating the króna was considered out of the question by common consent, and few people thought that an irrevocably fixed exchange rate could have improved economic performance or prospects without creating major havoc.

2.2. Further examples from Europe and North America

To tread more familiar ground, the exchange rate arrangement chosen by the European Union is also a good example of the benefits and costs of fixed versus flexible exchange rates. By introducing the euro, the EU has fixed the conversion rates of the individual national currencies internally in order to reap the benefits of fixed rates. At the same time, the EU allows the euro to float vis-à-vis the US dollar, the yen, and other currencies in international markets in order to benefit from floating. The United States, of course, does the same thing, and always did: there is no paradox involved. The point is that, either way, there are both benefits and costs involved, and the challenge for policy is to weigh them in view of the prevailing circumstances of the economy or area in question.

The main advantage of fixed exchange rates—if they are held fixed, that is—is currency

stability, which encourages foreign trade and investment, not least by reducing transactions costs and exchange rate uncertainty, thereby stimulating economic efficiency and growth over the long haul and restraining inflation, which is also good for growth. The mechanism is straight-forward, and stems from Adam Smith's time-honored idea that whatever is good for efficiency is also good for growth. Therefore, liberalization, privatization, and stabilization increase not only economic efficiency but also growth across countries and over time.

Empirical evidence seems to support these hypotheses. Increased efficiency means being able to squeeze more output from given inputs, as if an improvement in technology had taken place. Efficiency gains, therefore, are analytically equivalent to technological improvements, or technological progress in continuous time. Furthermore, increased efficiency often stimulates technological progress. For example, increased foreign trade and investment, which produce both static and dynamic efficiency gains, tend to go along with increased exchange of ideas, know-how, and technology, thus imparting a double boost to economic growth over long periods.

To this it needs to be added, however, that fixed nominal exchange rates may result in long-term misalignments in real exchange rates which may hurt trade, investment, and growth. Even if the nominal exchange rate is fixed, the real exchange rate floats, but the realignment of the real exchange rate when the nominal rate is fixed may take too long and cause too much damage. This is the main reason why devaluation is often deemed to be the best way to adjust, as was the case, for example, in the francophone countries in West Africa in 1994 when they successfully devalued their common currency (the CFA franc) vis-à-vis the French franc by 50%, thus severing the long-standing one-to-one relationship between the two currencies.

Another advantage of fixed exchange rates, it is often argued, is that they reduce or eliminate devaluation risk and thus lead to lower real interest rates. Lower interest rates, in turn, tend to stimulate investment, true, but they also tend to reduce domestic saving. Therefore, for fixed exchange rates to increase economic growth over time through increased investment it is necessary that the shortfall of domestic saving is more than offset by an influx of foreign capital to finance the increased investment. This is not necessarily the case, however, if domestic saving and investment are highly correlated despite high capital mobility across countries (Feldstein & Horioka, 1980).

The main disadvantage of fixed exchange rates is the ensuing inflexibility of economic policy in times of crisis. It can be good to keep open the possibility of exchange rate flexibility, as many examples bear witness. One example should suffice here. Unemployment in the United Kingdom (6% of the labor force) is currently only a little more than half that in France (10%). The reason is, *inter alia*, that Britain allowed the pound to depreciate against the Deutsche Mark in the 1990s, while France maintained a stable exchange rate of the franc vis-à-vis the mark. It also matters, probably a lot, that Britain also liberalized and decentralized its labor market, a process that has only recently begun in France. Thus, the strong franc policy coupled with inflexible labor market arrangements has helped keep unemployment high in France. The doubts often expressed in Britain, Denmark, and Sweden about the desirability of adopting the euro rest on their fears that Economic and Monetary Union (EMU) membership would restrain their ability to keep unemployment at bay at home.

Austria has taken another approach, even if its labor market arrangements have long been similar to those in Sweden. Austria joined the EU with Sweden and Finland in 1995 and then—like Finland, but unlike Sweden—decided with ten other members to adopt the euro from the outset in the hope, *ex post* if not *ex ante*, that the strict discipline thus imposed from outside would gradually reduce rigidity in the Austrian labor market and make wage formation more market-friendly and flexible (Hochreiter & Winckler, 1995).³

The discrepancy of views thus revolves around the question of which should come first: labor market reforms or irretrievably fixed exchange rates. The Swedes are not, at least not yet, confident that the structure of the Swedish economy, and of the Swedish labor market in particular, is flexible enough to adapt to the adoption of the euro. The Austrians, on the other hand, believe that their economy, including the behavior of labor unions and employers' associations, is flexible enough to adjust. These two different points of view are not necessarily inconsistent with one another. It may be that the Swedes are right in the short run and the Austrians in the long run. Time will tell.

This linkage between labor markets and exchange rate regimes explains why the US precedent is of limited value to Europe. A Californian who loses his job can easily move to Texas if the job situation is better there. In most cases, the language is at least no obstacle. The same does not apply to an unemployed Dane faced with good job prospects in Portugal. Further, US labor markets and wages are a good deal less tightly regulated and more flexible than European labor markets and wages. Unsurprisingly, therefore, labor mobility within Europe is much less than it is within the United States.

The advantages of flexible exchange rates are the same as the benefits of flexible prices and free markets in general: floating exchange rates help secure an efficient allocation of foreign exchange. Besides, floating rates help create scope for an independent monetary policy, including interest rate determination, in accordance with economic and political needs at home. Fixed exchange rates deprive the monetary authorities of this freedom, by tying their hands as intended, thereby forcing them to adjust interest rates at home to foreign rates in order to keep the exchange rate fixed.

Canada, Australia, and New Zealand are examples of relatively small, open economies that have allowed their currencies to float over long periods, and have, by and large, benefited from the resulting flexibility and independence of monetary policy, at least in their own judgment.⁴ The problem is, however, that a floating exchange rate tends to fluctuate a good deal, far beyond the swings observed in the prices of most goods and services; it does so partly because of speculation. Excessive short-term fluctuations in exchange rates tend to disrupt foreign trade and investment, and thereby also economic efficiency and growth in the medium to long run.

Flexible exchange rates are sometimes also blamed for sending confusing signals about international competitiveness (Grubel, 2000), thus distorting resource allocation. This argument is closely related to the one about the disruptive effects of excessive fluctuations in exchange rates, as described above. Flexible rates have also been blamed for blunting incentives to export, especially high-tech manufactures and services (Courchene & Harris, 2000). This argument is different: it has more to do with the level of the real exchange rate than with its volatility, and has led some observers in Canada to question the wisdom of continued flexibility of the exchange rate of the Canadian dollar vis-à-vis the US dollar. They

argue that a fixed exchange rate would impose greater discipline on manufacturers, thus giving them greater encouragement to remain efficient and to retain their market shares abroad.

True, the Canadian dollar has lost about one fourth of its value vis-à-vis the US dollar since 1970. Canada has run a current account deficit every year since 1970 with four exceptions. The deficit has been equivalent to about 2 1/2% of GDP on average, which is a bit larger than would seem consistent with a sustainable long-run ratio of gross external debt to GDP in Canada. On the other hand, Canada's exports have expanded from less than 20% of GDP in the early 1960s to over 40% in the late 1990s. It is not clear that a fixed exchange rate of the Canadian dollar vis-à-vis the US dollar would have produced smaller deficits and more rapid export expansion, for the outcome depends crucially on the reaction of economic policy and structure to a change in the exchange rate regime. In particular, it is impossible to know whether the Canadian labor unions would have greeted a one-to-one peg to the US dollar with increased wage moderation within a reasonable time frame or not.

The current Canadian debate about the tendency of flexible exchange rates to blunt incentives to export manufactures echoes an earlier debate about monetary accommodation in the Nordic countries. From the 1960s onwards, a typical devaluation cycle in the Nordic countries began with a wage hike negotiated by nation-wide employers' associations and labor unions which did not worry much about going over the edge because they knew they could count on the government to devalue the currency or expand the money supply to maintain full employment. This recurrent chain of events helps explain why the Nordic countries used to be more inflation-prone than most other OECD countries, until the pattern was broken in the late 1980s and early 1990s.

Unemployment then shot up to unprecedented heights for a while, but it has since come down again. Iceland was a particularly clear-cut case of this syndrome: the fishing industry knew from experience that it could always count on being bailed out by the government through devaluation, and therefore had less incentive to contain costs and to increase the efficiency of its operations. No doubt, the devaluation strategy helped give Iceland the second highest average inflation in the OECD region after 1945 (after Turkey), as noted earlier, and kept the króna permanently overvalued on average, thus stifling nonfish exports. The frequent devaluations in Iceland thus had a similar effect on manufacturing export incentives (but not on inflation!) as the gradual depreciation of the Canadian dollar, according to Courchene and Harris (2000). In either case, other things being equal, a fixed exchange rate might thus have created stronger incentives to export high-tech manufactures and services—just the kind of exports that usually are most conducive to economic growth.

So, all things considered, it stands to reason that some nations prefer to fix the exchange rates of their currencies while others do not, and that one and the same nation can rationally choose to peg the exchange rate at one time and let it loose at another—or, as in the case of Iceland reviewed at the beginning of this discussion, to adjust the peg in some circumstances and not in others, even if no formal regime shift has taken place.

This is not all, however. Until recently, the choice in the exchange rate policy arena was essentially between fixed and flexible exchange rates and a large number of intermediate arrangements (adjustable pegs, crawling pegs, dirty floats, and so on). There were thus several different ways of fixing the exchange rate to different degrees according to need and

taste and to let the exchange rate float within certain limits or bands, or without. For a long time, the member countries of the International Monetary Fund could be divided into three approximately equally large groups: fixers, floaters, and those who chose to take a position somewhere in between.

2.3. Does capital mobility call for corner solutions?

But the world has changed. Nearly perfect capital mobility across national boundaries since 1990 may, from a long-run point of view, have reduced the number of viable exchange rate policy options down to just two:

- An immutably fixed exchange rate, so much so that an exchange rate change is almost unthinkable. The idea is that other, milder forms of fixing lack credibility and cannot therefore be sustained in an era of global capital mobility. The only way, then, to rule out devaluation once and for all is to abolish the national currency and adopt a foreign one such as, for example, the US dollar (as Panama did in 1904) or the euro (as the eleven current members of the EMU did in 1999), or conceivably establish a currency board (as Hong Kong, Argentina, and Estonia have done, to name a few, in 1983, 1991, and 1992, respectively).⁵
- A completely free and flexible exchange rate that rises and falls in unfettered foreign exchange markets without government intervention. This, as Milton Friedman stressed almost half a century ago (Friedman, 1953), would eliminate balance of payments crises once and for all, by definition, and help sharpen the focus of monetary policy on price stability at home.

The main point here is that it may no longer be possible, or at least it is far from easy, to protect a weak currency against speculative attack when financial capital is free to move from country to country at a moment's notice. What is new is that investors and speculators around the world now have almost unlimited elbow room to move against weak currencies. This was not possible before; it was illegal.

Central banks that try to protect weak currencies from collapse often lose a lot of their foreign exchange reserves in doing so, as occurred, for example, in Thailand in the summer of 1997 and in Brazil at the beginning of 1999. But not always. Hong Kong managed to protect the value of its dollar throughout the Asian financial crisis of 1997–1998 by using public funds to buy up domestic equities, thereby preventing the stock market from crashing (Krugman, 1999). Thus the Hong Kong authorities were able to avert capital flight that would almost surely have forced them to devalue the Hong Kong dollar.

But Hong Kong seems to be an exception. More likely, the general rule is that nations that embrace perfect capital mobility *and* want to keep their own currency must allow their exchange rates to float, or at least to adjust, in the long run. If, instead, they prefer fixed exchange rates in the long run, or so the argument goes, they have to adopt a foreign currency and abolish their own. If so, the only way to protect the integrity of a national currency over the long haul is thus to abolish it, or, more precisely, to share it with others. That is an important part of the *raison d'être* of the euro.

Economists do not like corner solutions—and for a good reason, for most often there is

a better way. As far as exchange rate regimes are concerned, then, is it possible that there is a third way?—an intermediate position in which a range of fixing options can be maintained over long periods in a world where financial capital is free to move. My answer is yes, probably, but this requires monetary, financial, fiscal, and structural policies that are sound enough to keep the economy and currency in good health and thus to pre-empt speculative attacks on the currency by preventing it from becoming weak in the first place. Maintaining a healthy currency in an era of global capital mobility places much stricter demands on economic policies than before. A surge of demand fed by foreign loans or by inward foreign direct investment has monetary consequences for the borrowing or receiving country that are similar in many ways to those of fiscal expansion financed by domestic credit.

The ready availability and reversibility of short-term foreign financing seems likely to increase the frequency and scale of such booms—and busts, as occurred in Asia 1997–1998. It is impossible to permanently sterilize the economy against the vicissitudes of short-term capital (impossible without a return to capital controls, that is). Therefore, it is natural that some countries are attracted to the corner solutions, one or the other, but this should not necessarily leave the center of the spectrum vacant. In principle, it should be possible for other countries to improve their economic policies and structure enough to be able to embrace perfect capital mobility *and* keep their currency for a long time to come. This appears to be the prevailing mood among those Danes, Englishmen, Icelanders, Norwegians, Swedes, and Swiss who now feel that there is no rush to adopt the euro.

Let us now take a bit closer look at the European scene.

3. Europe: a quick look at the landscape

The ongoing globalization of financial markets presents an important political challenge to those European countries that have not yet decided whether to adopt the euro or not. For one thing, the adoption of a common currency is one of those things that require a broad political consensus between government and opposition.

The table below divides the European countries into four groups. In the first column we have the twelve countries that are already in the EMU and have thus already nailed down the conversion rates of their currencies once and for all (as of 1 January 1999) by adopting the euro. They are abolishing their own national currencies, even if individual currencies will remain in circulation until 1 July 2002. Finland and Ireland both belong to this group. Before the fact, some would perhaps have expected those two nations on the geographic periphery of Europe to be reluctant to replace their own currencies by the euro, but that is not what happened.

Both countries have benefited hugely from their EU membership. To give an example, food prices in Finland fell substantially following their entry into the EU in 1995, because Finnish farm policies before 1995 were even more costly to consumers and tax payers than the Common Agricultural Policy of the EU. The reduction in food prices following the accession of Finland increased the purchasing power of households significantly, and thus helped jumpstart the Finnish economy after the severe slump in the early 1990s. Unemploy-

Table 1
Europe: Four groups of countries

EMU 12	EU 3	Waiting room	EFTA 3
Austria	United Kingdom	Poland	Switzerland
Belgium	Denmark	Czech Republic	Norway
Finland	Sweden	Hungary	Iceland
France		Estonia	
Germany		Slovenia	
Greece		Cyprus	
Ireland		Malta	
Italy		Latvia	
Luxembourg		Lithuania	
Netherlands		Slovakia	
Portugal		Bulgaria	
Spain		Romania	
		Turkey	

ment has fallen by half. Finland is now one of the most dynamic countries in Europe, like Ireland. Nokia is the largest corporation in Europe, by stock market valuation.

Column 2 shows the three EU countries that have not yet adopted the euro. The United Kingdom, Denmark, and Sweden have not yet adopted the euro because they are not ready. Britain is unique in that its largest opposition party (the Conservative Party) is against the abolition of pound sterling. Elsewhere in the EU there is a broad consensus between government and opposition, as is necessary. Sweden and Denmark have thus far gone slowly, but both show signs of increasing interest in adopting the euro in the fullness of time. The Danes will settle the issue in a referendum. The opposition in Sweden has been quite willing for years to go all the way and adopt the euro, but the governing Social Democrats hesitated until 1999. Greece, by contrast, has always been willing, but was not deemed ready for EMU membership until mid-2000, effective 1 January 2001, and is therefore shown in column 1.

Column 3 shows the thirteen countries that have either begun or are about to begin negotiations on the terms of their prospective membership in the EU in the next round: Ten former communist countries in Central and Eastern Europe, two small island states in the Mediterranean, and Turkey. The first six countries in the column have already started negotiating the terms of their entry, the remaining six are next in line. All these countries want to adopt the euro as soon as possible: they want full partnership in everything the EU has to offer. They want to share not only the rights but also the obligations of membership. The EU, for its part, wants to receive them.

Full membership in the EU is the final destination of the economic and political reform movements in the former communist countries on their arduous journey from plan to market. For this reason, perhaps, the somewhat reluctant attitude of the EU towards its prospective expansion to the East seems to have softened recently, and the same is true of its attitude to Turkey's long-standing application for membership. Many Turks consider EU membership crucial for tilting the political balance in their country in favor of liberal reformers, away from fundamentalists and other opponents of economic and cultural modernization. This general argument about policy reform is not confined to Central and Eastern Europe and Turkey. It applies also to some other current and potential EU and EMU members who may

feel that the main attraction of membership perhaps is not the fixed exchange rate as such but the discipline that membership is intended to place on domestic policies (e.g., competition policy and agricultural policy). Albania also wants to get in, but must wait.

3.1. The EFTA countries

The European Free Trade Association (EFTA) was established in 1960 as a free trade club for those countries not wishing at that time to join what is now the European Union. The original members were Austria, Denmark, Norway, Portugal, Sweden, Switzerland, and the United Kingdom, later sometimes called the “Outer Seven.” One of their aims was to strengthen their future bargaining position in establishing a wider free trade area, including the EU. But it took 34 years before the European Economic Area (EEA), comprising all the EU and EFTA countries (except Switzerland and Liechtenstein), was formed in 1994. Finland became an associate member of EFTA in 1961 and a full member in 1986; Iceland became a full member in 1970; and Liechtenstein (formerly associated through a customs union with Switzerland), in 1991. As time passed, however, EFTA shrank as Britain and Denmark (1973), Portugal (1986), and Austria, Finland, and Sweden (1995) left EFTA and joined the EU.

Which brings us to the fourth and last column of the table with the three remaining EFTA countries (let us leave out Liechtenstein, population 30,000). Switzerland is a chapter unto itself; the country is not even a member of the United Nations. Even so, the main political parties favor EU membership. Switzerland’s application for membership was not withdrawn when the Swiss rejected participation in the European Economic Area (EEA) in a referendum in the early 1990s; rather, the application was laid on ice. The government is now waiting for an appropriate moment to try again.

Norway is in a similar situation. The main political parties in Norway all support membership, as do employers and the influential labor movement, and, eventually, all would probably want full membership, with the euro and all, like Sweden and Denmark. Norway cannot easily, at least not in the long run, follow a fixed exchange rate policy where the sole anchor is their own determination to keep the rate fixed. True, the oil industry has generated a lot of foreign exchange earnings that reduce the likelihood that the Norwegian krone will come under serious attack.

The banking crisis in Norway a few years ago shows, however, that its oil wealth does not provide the country with blanket protection against economic difficulties. Therefore, when all is said and done, Norway must choose: (a) it must fix the exchange rate of the krone permanently by adopting the euro; (b) let the krone float without much official intervention; or (c) let things stay the way they are for the time being—that is, stick to the pegged-rate regime in principle, try to keep the currency in good health through good macroeconomic management, but reserve the right to adjust the peg from time to time should the need arise.

In practice, however, the Norwegian exchange rate regime at present is probably better described as *de facto* inflation targeting along the lines of the European Central Bank, with an inflation target between zero and 2% per year (Hamilton et al., 2000). The choice of future strategy must be based, among other things, on the extent of synchronization of business cycles in Norway and the rest of Europe, an unsettled issue in empirical research. A close

correlation of business cycles at home and abroad would support the adoption of the euro, whereas limited correlation might be taken as an argument for floating.

How about Iceland?—where possible membership in the EU has not yet been placed on the political agenda. Recently, the largest opposition party (Social Democrats) came out in favor of membership, but the present governing coalition parties are opposed, and they have a substantial majority in the parliament. Their opposition to membership is based mostly on their fear that, if it joined, Iceland would have to share the access to its limited fish resources with other EU members. Thus far, this fear has precluded serious discussion in government circles of EU membership, let alone of adopting the euro. One of the two corner solutions has thus effectively been ruled out. Does this drive Iceland into the other corner?

Not necessarily, or at least not as long as continued unilateral pegging of the króna within broad bands (+/−9%) retains its credibility in the eyes of speculators and other currency traders. Failing that, however, unchanged unilateral pegging might be viewed as tantamount to a silent declaration that the fixed exchange rate policy will gradually, or perhaps even all of a sudden, give way either to greater flexibility within the current regime or to free floating. With gross foreign reserves equivalent to only six weeks of imports since 1994 and with foreign short-term liabilities equal to 1.5 to 2.5 times gross foreign reserves since 1997, this seems to be the semiofficial inclination of the government. The risk of opting for greater flexibility rather than free floating—that is, of deciding to keep the pegged-rate regime, but reserve the right to adjust the peg when the need arises—is that exchange rate movements then may be less orderly than they would be under floating, thereby hurting foreign trade and investment and ultimately also economic growth.

3.2. The relevance of natural resources

Norway and Iceland merit a little extra attention in a discussion of exchange rate regimes and economic and monetary integration in consideration of their dependence on their most important natural resources, oil and fish.

Take Norway first. Since the mid-1970s, Norway has become the world's second largest exporter of oil (after Saudi-Arabia). Oil accounts for about 10–15% of Norway's GDP, depending on the price of oil. Clearly, the oil boom has been a blessing for Norway. Even so, it is worth noting that the ratio of total exports of goods and services to GDP has remained essentially unchanged since before the oil discoveries. This means that oil exports have crowded out nonoil exports krone for krone, relative to GDP. This is one of the chief symptoms of the Dutch disease. By contrast, Norway's neighbors to the south and east, Denmark, Sweden, and Finland, have all seen their exports grow considerably more rapidly than GDP since 1960. One may wonder what economic activity (high-tech? low-tech?) gave way to the oil sector in Norway. Could this help explain why Norway has no world-class telecommunications company that can compare itself with Nokia and Sweden's L. M. Ericsson?⁶

Iceland derives almost half of its export earnings from fish exports, while the fishing sector's share in GDP at factor cost is 11% (1999), and falling. As in Norway, exports of goods and services in Iceland have remained stagnant for a long time, at about one-third of GDP, as noted earlier, a low proportion in a country with fewer than 300,000 inhabitants. In

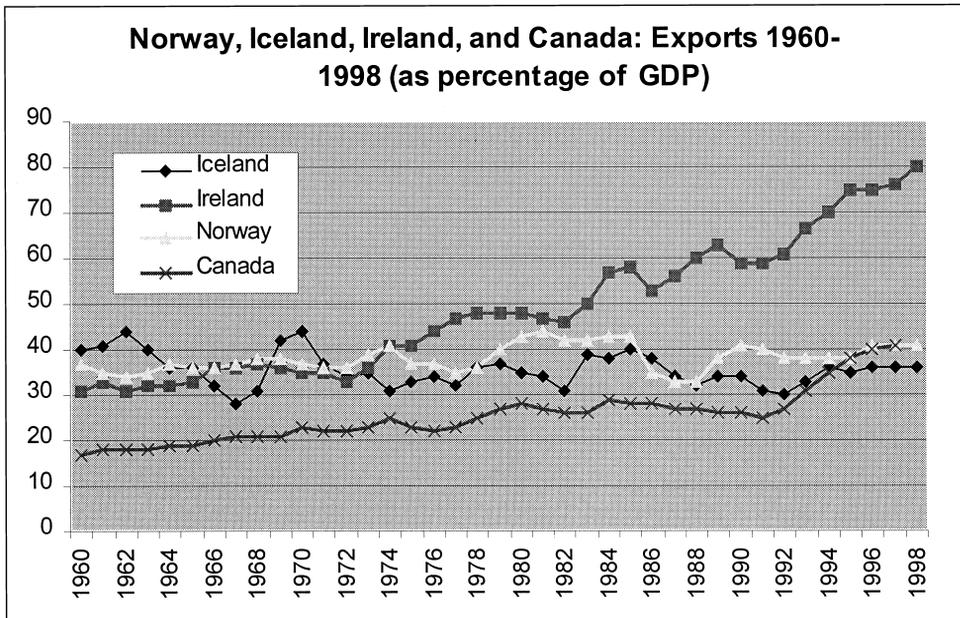


Fig. 1. Norway, Iceland, Ireland, and Canada: Exports 1960–1998 (as percentage of GDP).

fact, Iceland and Norway are the only industrial countries where exports and imports have not grown more rapidly than output since the war (Gylfason, 1999). Ireland, on the other hand, has seen its exports double relative to GDP since 1960 (see figure)—in part, it seems safe to assume, thanks to its EU membership since 1973. The rapid expansion of foreign trade (and foreign investment), in turn, has contributed significantly to Ireland's rapid economic growth in recent years, which has catapulted its national income per capita from being close to the bottom of the EU league to well above average (adjusted for purchasing power parity).

Why does natural resource abundance matter for exchange rate policy? To make a long story short, Iceland's dependence on fish, with the associated recurrent booms and busts over the years, has resulted in a permanently overvalued króna. As a result, foreign debt has more than doubled from less than 30% of GDP in 1980 to 70% in mid-2000, and seems likely to reach almost 90% of GDP by 2004, according to official forecasts. Over the years, political preoccupation with the fishing industry, which is the backbone of economic activity around the sparsely populated coastline of the country and employs 9% of the labor force, has circumscribed the exchange rate policy stance of the government in three main ways:

- First, until recently, by periodically dictating the devaluation of the króna to restore profitability to the fishing industry when catches or fish prices slumped or when wage and price inflation at home had eroded profits.
- Second, by standing in the way of major fiscal reform centered on the introduction of fishing fees—for example, by auctioning off the catch quotas issued by the government rather than handing them out for free to boat owners based on previous catch experience (in 1981–1983), as has been done since 1984. In effect, this would mean the

removal of the substantial hidden subsidies to the fishing industry inherent in the current system of gratis quota allocations to boat owners.⁷ By thus leveling the playing field of the fishing industry and other export and import-competing industries (e.g., by using the revenue from the fees to lower distortive taxes), such reorganization of public revenue collection would most likely lower the real exchange of the króna in the short to medium term, thereby creating further incentives for rapid expansion and diversification of exports.

- Third, by keeping Iceland out of the EU, again mostly for regional policy reasons, thereby ruling the adoption of the euro out of court.

In this way, the exchange rate has been used directly and indirectly as an instrument of regional policy.

A similar story can, in fact, be told about Norway—not, though, about its oil industry, but rather about its tiny fishing industry which accounts for less than 1% of output and employment. Even so, the Norwegian fishing industry is, like its Icelandic counterpart, important from a regional policy point of view, for Norway, like Iceland, has a long albeit sparsely populated coastline. It is probably no exaggeration to say that perhaps the single most important reason for Norway's rejection of EU membership in the referenda of 1972 and 1994 was the vociferous campaign against membership waged by the influential fishing and farming lobby. The same applies to Iceland—except only more so, because the Icelanders have not even been given a chance to express their views on membership in a referendum, even if public opinion polls have for several years shown a majority to be in favor of applying for membership. This may be viewed as another symptom of the Dutch disease in both countries. Yet another symptom, perhaps, is the low rate of foreign direct investment in both countries until quite recently. To this day, foreigners remain prohibited from investing in Icelandic fishing firms.

The upshot of this account is this. Over the years, the fishing industries of Norway and Iceland have exerted disproportionate influence on economic policy in both countries, including exchange rate policy. This is mainly because the authorities, for reasons of regional politics, including disproportionate representation of rural areas in the legislatures of both countries, especially in Iceland, have been unwilling to restrain the rent-seeking that is inherent in these industries. Agriculture and fisheries, therefore, have a long history of dependence on direct and indirect subsidies. In recent years, the fisheries management regime has progressed considerably in both countries but especially in Iceland, with the advent of individual transferable catch quotas that are allocated to boat owners free of charge and are freely transferable in Iceland, but not yet in Norway. But the problem is that these gratis quota allocations are tantamount to huge subsidies that reduce the transparency of fiscal operations, impede necessary rationalization in fishing and fish processing, and violate basic principles of economic efficiency and fairness.

Similar problems have not arisen in connection with the oil industry in Norway thanks to the government's judicious oil management policies. Most importantly, perhaps, Norway's oil, like Iceland's fish, is a common property resource by law and, on this basis, the government takes in about 80% of the oil rent every year, an amount roughly equivalent to 8% of GNP. The government invests the funds in foreign securities, thereby shielding the

domestic economy from the effects of the huge inflow of oil revenues as well as from socially counterproductive rent-seeking. This has undoubtedly helped make Norway one of the few oil-producing countries that have managed to avoid serious economic problems in recent years (apart from the banking crisis of the 1990s that was unrelated to the oil sector). And this also helps explain why Norway keeps accumulating assets abroad while Iceland accumulates debts.

3.3. Lessons for the Western Hemisphere

The current debate of the pros and cons of alternative exchange rate regimes for Europe and the formation and prospective expansion of the EMU are relevant to other countries around the world. What lessons, if any, for the Western Hemisphere can be derived from this debate and development?

Let me make three points.

First, the European precedent may be of limited value to the Western Hemisphere as a whole, and even to its northern flank, that is, the signatories of the North American Free Trade Agreement (NAFTA) of 1992 (Canada, the United States, and Mexico), insofar as economic and monetary integration in Europe is, in part and by design, politically motivated. For obvious historical reasons (three devastating wars since 1870), European integration is explicitly aimed at promoting economic prosperity, progress, and peace. A comparable political motive is missing in North America.

In principle, however, economic and monetary integration between the United States and Mexico appears to be no more far-fetched than one between the EU and Turkey. As far as Canada and the United States are concerned, the political impetus for a common currency is also missing, even if Canada is more closely connected with the United States through trade than any single EU member is with the rest of the EU membership (Courchene & Harris, 2000). The absence of a political dimension as in Europe does not reduce the weight of the economic argument for dollarization in Canada and Mexico, or for the formation of a North American Monetary Union, but it does reduce the weight of the overall argument for monetary union. Those who are uncertain about how to weigh the economic benefits and costs of a monetary union are less likely to make up their minds in favor of a union on political grounds in North America than in Europe. Put differently, the broad political consensus between government and opposition that is a *de facto* prerequisite for a common currency in Europe seems unlikely to materialize any time soon in North America, let alone in the Western Hemisphere as a whole. If so, then Robert Mundell's (Mundell, 2000) call for a common world currency seems virtually certain to go unheeded for a long time to come.

Second, the eleven members of the Latin American Integration Association (ALADI),⁸ previously known as the Latin American Free Trade Association (LAFTA), which, as its European counterpart, was established in 1960, were, until recently, approximately evenly spread across the exchange rate policy spectrum. In 1998, there were six peggers, including one with a currency board (Argentina), and five floaters. Once again, this shows that different countries weigh the economic benefits and costs of alternative exchange rate regimes differently. Since 1998, one of the floaters (Ecuador) has decided to adopt the US dollar. Others might follow. This seems reasonable. The long history of high inflation in Latin

America and the progress of economic liberalization in recent years should tilt the balance further in favor of fixed exchange rate regimes, at least until the objectives of liberalization and stabilization have been achieved.

Third, natural resources play an important economic role throughout the Western Hemisphere. In the eleven ALADI member countries, the average share of primary (i.e., non-manufacturing) exports in merchandise exports in 1998 was 67%.⁹ Empirical evidence seems to indicate that a high share of primary exports in merchandise exports is associated with stunted exports and sluggish economic growth across countries. The main channels of transmission from natural resource abundance via high primary export shares to slow growth that have been identified in the literature are the Dutch disease and rent-seeking (Sachs & Warner, 1999), as well as the relatively low educational requirements of primary industries, including agriculture in many cases (Gylfason, Herbertsson & Zoega, 1999).

Those who work and own capital in natural-resource-based industries may understandably seek to use their influence in the political arena to sway political decisions in their own favor by resisting policy changes aimed at increasing the share of high-tech manufacturing and service exports in total exports. This may include attempts to resist exchange rate policy changes or regime shifts intended to create stronger incentives for producers through greater discipline. For this reason, there is a risk that producers in primary industries, including export-oriented farmers, may turn against proposals for fixed exchange rates, let alone permanently fixed rates through dollarization or deep economic and monetary integration with other countries (see Sachs, 1985).

But this is speculation. It remains to be seen whether the important exchange rate policy choices that need to be made in Latin America in the years to come will be complicated by problems related to regional politics and rent-seeking in and around the natural-resource-based industries, as has occurred in Norway and Iceland.

4. Conclusion

Norway and Iceland's exchange rate policy options in the years ahead need to be viewed in the context of the importance of natural resources to both countries. It is impossible to say, however, whether the two countries must straighten out their fisheries management regimes in order to further reduce their dependence on fish before settling the exchange rate question or the other way round.

Perhaps the best strategy would be for them to try to do both at once: aim quickly for maximum efficiency and fairness and commensurate contraction of the manpower and capital devoted to fishing, thereby reducing the remaining obstacles to EU and EMU membership in both countries, and also aim for EU membership as soon as possible in the hope that Norway and Iceland could together help reform the Common Fisheries Policy of the EU enough to make it palatable for them, with efficiency and growth gains for all (Gylfason, 1998). For when you have two choices, try to take them both, if possible.

Notes

1. Iceland achieved home rule from Denmark in 1904, virtual autonomy in 1918, and full independence in 1944, whereas Ireland gained independence from the United Kingdom in 1922.
2. The ratio of exports of goods and services to GDP in Iceland has hovered around one third at least since 1945, without showing any tendency to increase over time. This is a very low ratio for a country with fewer than 300,000 inhabitants. The ratio of merchandise exports to GDP was also about one third on average from 1870 to 1945. Service exports were relatively small in this period. This means that the export ratio of Iceland has essentially been unchanged over the past 130 years.
3. Along the same lines, Grubel (2000) advances the argument that “labor market flexibility is endogenous to the exchange rate regime. It implies that monetary union [between the United States and Canada] will eventually force the adoption of policies by employers and labor, which result in more efficient dealing with exogenous economic change and instability.” The key word here is “eventually.”
4. On the case of Canada, see Murray (2000).
5. Recently, there has been serious debate in Argentina about the possibility of adopting the US dollar in lieu of the peso. Estonia aims to adopt the euro as soon as it joins the EU.
6. Neither does Denmark, true, but Bang & Olufsen, a world-renowned producer of high-tech audio and video products, is Danish.
7. The annual fish rent in Iceland is estimated at about 5% of GNP in long-run equilibrium. For comparison, Norway’s annual oil rent is estimated at roughly 10% of its GNP.
8. The members of ALADI are Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.
9. In Canada, the primary export share in 1998 was 33%, compared with 18% in the United States.

References

- Courchene, T. J., & Harris, R. G. (2000) North American monetary union: analytical principles and operational guidelines. *North American Journal of Economics and Finance*, 11, January, 3–18.
- Dornbusch, R., & Fischer, S. (1986). Stopping hyperinflations: past and present, *Weltwirtschaftliches Archiv*, 122, April, 1–47.
- Feldstein, M., & Horioka, C. (1980). Domestic savings and international capital flows, *Economic Journal*, 90, June, 314–329.
- Friedman, M. (1953). The case for flexible exchange rates. In *Essays in Positive Economics*, 157–203. Chicago: University of Chicago Press.
- Grubel, H. G. (2000). The merit of a Canada-US monetary union, *North American Journal of Economics and Finance*, 11, January, 19–40.
- Gylfason, T. (1998). Prospects for liberalization of trade in agriculture, *Journal of World Trade*, 32, February, 29–40.

- Gylfason, T. (1999). Natural resources and economic growth: a nordic perspective on the Dutch disease, WIDER Working Papers No. 167, October, Helsinki.
- Gylfason, T., Herbertsson, T. T., & Zoega, G. (1999). A mixed blessing: natural resources and economic growth, *Macroeconomic Dynamics*, 3, June, 204–225.
- Hamilton, Carl, B., Øystein Thøgersen, Marianne Andreassen, and Harald Magnus Andreassen (2000). Norsk pengepolitikk, Norges Banks rolle og bankens gjennomføring av pengepolitikken i 1999 og første del av 2000, Working Paper Series 5/2000, Centre for Monetary Economics, Norwegian School of Management, Oslo.
- Hochreiter, E., & Winckler, G. (1995). The advantage of tying Austria's hands: the success of the hard currency strategy, *European Journal of Political Economy*, 11, 83–111.
- Krugman, P. (1999). *The Return of Depression Economics*, New York: W. W. Norton.
- Mundell, R. A. (2000). A reconstruction of the twentieth century, *American Economic Review*, 90, June, 327–340.
- Murray, J. (2000). Why Canada needs a flexible exchange rate, *North American Journal of Economics and Finance*, 11, January, 41–60.
- Sachs, J. D. (1985). External debt and macroeconomic performance in Latin America and East Asia, *Brookings Papers on Economic Activity*, 2, 523–564.
- Sachs, J. D., & Warner, A. M. (1999). Natural resource intensity and economic growth, Chapter 2 in Jörg Mayer, Brian Chambers, and Ayisha Farooq, *Development Policies in Natural Resource Economies*, Edward Elgar, Cheltenham, U. K., and Northampton, Massachusetts, in association with UNCTAD.