In recent years, Ireland acquired the distinction of being the fastest growing economy in Western Europe. Between 1995 and 2000 Ireland’s gross domestic product (GDP) in constant dollars increased 50 percent. The major contributing factors behind this rapid growth have been a combination of domestic demand, foreign direct investment, healthy export markets, and government fiscal policy. Ireland, unaccustomed to being the economic powerhouse of Western Europe, has been trying to strike the perfect balance that encourages growth while controlling inflation. The task of controlling inflation is made harder by the continual decline of Ireland’s unemployment rate. In 1995 Ireland had a 14.1 percent unemployment rate, but it had fallen to 4 percent by 2000.

The Celtic Tiger Roars

Ireland has become the center for high-tech industries in Europe, resulting in major computer and technology firms investing in the country and moving operating centers to Ireland. The economy has been growing at an unprecedented rate, unemployment is at an all-time low, and the government shows no signs of trying to slow the economy down and limit annual growth. In fact, they have recently continued enacting tax cuts, eliminating property taxes and easing corporate tax requirements in an effort to increase consumption, draw new companies to the country, and promote additional economic growth.

There are two primary models for economic growth - the Solow model and the Endogenous model – neither of which seems to be able to explain both increasing standards of living and the vast wealth disparities in nations around the world. The Solow model suggests that countries are always either moving towards or are already at a steady state. In Ireland’s case, the increase in population needed to staff growing industry and the technological advances that have made the workforce more efficient would cause the output per worker to increase and the capital per worker to decrease (as indicated by the movement from point A to point B on Figure 1). This explains the increases in the standard of living that Irish citizens have experienced over the last five years.

The endogenous growth model suggests an even brighter future for Ireland. This model suggests that higher economic returns beget additional capital inflow that will result in more growth. The suggestion is that Ireland would be at point A on Figure 2, and would therefore continue to see additional growth. Given Ireland’s efforts to attract additional business and create economic centers like Dublin, it seems likely that they hold stock in the cross-fertilization potential of the endogenous growth model.

Inflation Concern in a Growing Economy

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The Phillips curve (Figure 2) illustrates the tradeoff between higher inflation and lower unemployment. In this model, when unemployment equals the natural rate of unemployment, then actual inflation equals the expected rate of inflation. \[ p_t = p^e_t - \beta(U-U_N) + \epsilon. \] If initial expectation of inflation is high, then the economy will have to take an even greater inflation tradeoff to reduce unemployment (indicated by the movement from point A to point B), which appears to be what is happening in Ireland. Lower unemployment in this context appears to mean an unemployment rate below the natural rate, given the steady high rates of unemployment prior to the mid-1990s, but it is difficult or impossible to know a country’s natural rate of unemployment. Just as the United States saw unemployment rates drop below what was considered the natural rate during the last economic boom, Ireland too may need to redefine its natural rate of unemployment. A higher level of expected of inflation can also increase the rate of inflation for the same level of unemployment (indicated by the movement from point A to point C). The expected rate of inflation for Ireland is also difficult to know because as a European Union country, Ireland is expected to keep its inflation rate below 2 percent and we expect that the Irish would be confident in their governments desire to meet that target, especially in these early years of the EU. On the other hand, Ireland has had inflation above that target for 1999 and 2000, and some would suggest that expected inflation is based on “recently observed inflation.”

Historically, inflation in Ireland has ranged from 2.5-3 percent annually accompanied by unemployment rates of up to 19-20 percent, where they peaked in 1991. Since then, the economic boom has caused a drastic reduction in unemployment as foreign firms have come into Ireland and created more jobs than there are people to fill them. Initially, this enabled Ireland to exploit an elastic labor force. Unemployment dropped steadily to more stable 4% in 1998 without inflation rising appreciably as people assumed new jobs. However, in 1998, the labor market began to reach its limits, and new jobs were being created with no one to fill them. This increased demand for labor pushed wages up, despite Ireland’s restrictive wage laws, leading to higher prices to cover labor costs. Additionally, the very high level of employment pushed consumer confidence, and therefore consumption demand, much higher than in recent history. This increased demand also had a part in pushing up prices. The result is that in recent years inflation has hovered around 5-5.6 percent, the highest rate of inflation in the entire European Union. With Ireland’s continuing exceptional GDP growth, there is cause for concern about inflationary pressures.

The European Monetary Union has warned Ireland that their inflation is too high and must be brought back under control. If the Irish economy becomes difficult to control, the EMU will have a difficult time bringing it back in line because monetary policies tailored to the needs of each country in the Union are impossible, and the contraction that would be necessary to ease Ireland’s economic problems would harm most of the other economies in the Union.

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Furthermore, if the Irish economy takes a huge hit as a result of their high inflation, the economic slowdown could spread to neighboring countries and bring the entire European Monetary Union into economic crisis.

Because they are required to keep their interest rates within EU-mandated bands (circa 3%), the government must use fiscal policy to reduce inflation. A standard analysis would suggest that the government should use a combination of tax increases and government spending cuts to shrink the economy. Unfortunately, these measures are politically unpopular and therefore difficult to implement. In fact, government policy has been, thus far, to continue enacting policies to expand the Irish economy: consumption actually increased by 56% between 1998 and 1999, and increased a further 11% between 1999 and 2000. Private consumption has likewise increased steadily since 1994, with a particularly sharp jump (37%) between 1998 and 1999. These numbers are indicative of the numerous tax cuts and other labor-friendly policies that the government has enacted over the past couple of years. Based on price levels, inflation in 1998 was 5.7% (using 1995 as the CPI base year) and 13.4% in 2000—an increase of 135%.

The Irish government should be concerned about economic overheating—although the global slowdown in the wake of the U.S. tech bubble burst and especially the terrorist attacks of September 11 may actually help put the brakes on the Irish economy without direct government intervention. They should be concerned that their high inflation means that their real interest rates are lower than any other country in Europe, \( i = r + p \), since the European Central Bank sets nominal interest rates for the entire EMU. This means that investors are getting a smaller real return on their investments than in any other country, and might decide to pull out of Ireland in favor of investing elsewhere in Europe (although this too could be seen as natural market regulation in the absence of government intervention.) If Ireland wants to keep foreign investment flowing into the country, they must take steps to bring inflation under control. High inflation also means that domestic goods are overvalued and less competitive, creating another incentive to limit inflation.

Ireland’s membership in the EU monetary union puts it at the lower right vertex of the Impossible Trinity: it now has exchange rate stability and full financial integration with the rest of Europe, but at the cost of monetary independence (all monetary decisions are controlled by the European Central Bank) and capital controls. Ireland’s situation is further complicated by its membership in the United Kingdom, and its relationship with Britain, which has not joined the EU.

**Debts and Deficits**

As expected, with an economy growing at such a fast pace, the government of Ireland has had huge budget surpluses. In 1999 the surplus for the central government was 1,513 million euros and doubled (3,171.2 million euros) in 2000. With surpluses, Ireland has been able to pay down its government debt every year between 1995 and 2000.

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9 Ibid.
As Ireland’s unemployment has diminished, their domestic demand for goods has skyrocketed, and as of 2000, Ireland imported almost 75% of the goods that it consumed domestically\(^{11}\), most of it from the United States and the rest of the European Union. Yet despite this huge demand for imports, Ireland’s export markets have been healthy enough that Ireland could export their technology in sufficient quantities to cover their imports. Until 1999 they managed to continue running a current account surplus with no trade deficit. As external markets have slowed, however, so have Irish exports, while domestic demand has not changed since employment is still so high. For this reason the current account has slipped into deficit in 2000 and 2001.

**Current Account**

The current account has been in surplus, in decline from 1996 to 1999, and in 2000 the current account slipped into deficit. This deficit may have come as a result of the nosedive that net national savings took in 1998-1999. Although it began to rebound in 1999-2000, the net national savings was still half what it was in 1997-1998.

In 1999, government spending and consumption grew at a faster rate than in previous years. This may be due in part to the government’s attempt to create and build the infrastructure to support the increase in GDP that came with the technology boom because infrastructure development has not kept pace with growth. The “Celtic Tiger” evolved from a primarily agricultural and tourist economy to a capital-intensive tech-based economy over a relatively short period of time. In 2000, the last year for which we have complete information, with GDP growth of 11.5 percent in constant dollars, Ireland also saw a 9.9 percent increase in consumer spending and a 7 percent increase in capital investment. Furthermore, Ireland boasts low corporate tax rates and relatively low wages. As a result, foreign firms find investment in Ireland attractive. However, the low rate of taxation has prevented Ireland from building up the infrastructure required to retain a high level of FDI, and firms have begun to scale back their operations in Ireland.

Foreign direct investment (FDI) has been a major contributing factor to Ireland’s economic growth, with American firms making up the majority of the high-tech industry in Ireland\(^{12}\). Over the last several years, many factors have led to this high level of FDI in Ireland. The Government instituted the National Development Plan (NDP), which present comprehensive blueprint got reaching four strategic objectives: (1) sustainable economic and employment growth; (2) improved international competitiveness; (3) balanced regional development; and (4) general social inclusion. The plan proposes several mechanisms for increasing productivity, with special emphasis on FDI projects. The NDP, which will be implemented over a six-year period, has caught the eye of foreign investors.

The other side of this coin is that the Irish economy is heavily dependent on the health of economies in countries that house corporations sponsoring FDI in Ireland. A majority of the high-tech companies that are currently operating in Ireland are American companies. The recent economic slowdown in the United States has led many of these companies to pull back on some

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\(^{11}\) “Burning Too Bright,” Business Week Online, April 10, 2000

of their investment plans, which could potentially push the Irish economy into severe recession, especially if prices continue to rise as jobs begin disappearing.

Overall, the high level of FDI in Ireland has contributed to the trade deficit that Ireland now faces. According to the open-economy investment/savings model, as a country’s level of domestic investment increases relative to domestic savings, its current account will diminish. Once investment exceeds savings, the current account fall into deficit, which is what has occurred in Ireland over the past three years.

Exchange Rates

Since Ireland is a member of the EMU, its exchange rates are fixed along with every other EMU country by the European Central Bank. This means that when there are shocks in the goods market as there will invariably be when the major Irish exporting sector is the volatile high-tech industry, the government must enact policies to maintain the exchange rate of the currency that is set by the ECB. Since Ireland can do very little, if anything at all, to influence the direction of the Euro they must be willing to use fiscal policies to offset shocks in the goods market. Currently, with global technology firms pulling back, Ireland must be willing to contract their economy in order to maintain their status within the guidelines established by the ECB. Ireland’s actual fiscal policies, however, have been quite the opposite. During the economic boom, according to the AA-DD model, the government should have been enacting small fiscal contractions to keep the economy under control and output close to their equilibrium level. Instead, however, they used expansionary fiscal policy, expanding the AA curve even further to the right, increasing output even more than the shocks in the goods market. In order for the European Monetary Union to counteract these policies, they would have to initiate a substantial contraction in the money supply. This would cause the Euro to appreciate against the dollar, making exports more expensive and injuring the economies of all the European Union countries that depend on exports for a healthy economy, and is not likely, therefore, to be forthcoming.

Recommendations

Develop Domestic Industry: Clearly Ireland depends on exports to keep their economy healthy, but most of the exporting industries are foreign companies. To avoid the effects of cutbacks among these companies in Ireland when their native economies slow, the Irish government must enact policies to nurture the development of Irish technology companies with their own niche in the international market. This can be done through education grants, financial and other incentives to convince Irish expatriates to come home, or other means.

Enact Contractionary Fiscal Policy: Despite the political unpopularity of such measures, they must be taken to lower inflation and to keep the Irish economy from overheating and crashing. Since tax cuts are so popular in Ireland, perhaps the way to start is by contracting government spending and increasing taxes on import-competing industries, which would have the effect of reducing consumption but protecting domestic producers of those goods. Additionally, increasing government revenue from tax dollars would allow Ireland to develop the infrastructure that they require in order to foster sustained domestic investment, including FDI,

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even if the overall levels of investment fall. Increased corporate taxes might also be a good idea, because it would allow the Irish government to control the level of foreign direct investment in Ireland by creating a mild disincentive for corporations to automatically set up shop in Ireland. A lower level of FDI would lower the current account deficit as well as help to end the labor shortage that is contributing to higher prices. On the other hand, FDI is beginning to dip on its own because of international economic slowdown, so the government might want to watch what happens to investment levels before levying corporate taxes.

**Improve Domestic Infrastructure**: What government spending remains after cuts are made should also focus on improving domestic infrastructure in order to maximize potential for FDI and other sustained domestic investment even in slow economic times.