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to the British Columbia Chamber of Commerce
and the Business Council of British Columbia
Vancouver, British Columbia
18 February 2008

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The Implications of Globalization for the Economy and Public Policy

I am delighted to give my first public address as Governor of the Bank of Canada in Vancouver, not only because my roots are here in the West, but also because Vancouver aptly symbolizes the subject of my remarks today – globalization.

I chose to speak about globalization at the outset of my tenure because it will continue to be one of the forces shaping our economy and economic policy for years to come. Steady advances in transportation, communication, and information technologies, underpinned by the more widespread adoption of free-market economic policies, are shrinking the globe and expanding the global economy. It is incontestable that the current wave of globalization has been, on balance, of great benefit. Hundreds of millions of people have already been lifted out of poverty, with the real potential for hundreds of millions more to share their destiny.[1]

Globalization has also had numerous economic benefits for Canada. The recent period of international integration has coincided with the second-longest expansion in our nation's history, characterized by rising real incomes, surging employment, and low, stable, and predictable inflation. However, these outcomes are not preordained; to reap fully the benefits of globalization, policy-makers must weigh its implications and respond effectively to its challenges.

In my time today, I will discuss these policy challenges, particularly those related to the conduct of monetary policy. First, I will talk about how the current wave of globalization differs from previous periods of economic integration, and then I will address some of the economic impacts of globalization. Before concluding, I will also say a few words about the current outlook for the Canadian economy, which, not surprisingly, is importantly influenced by global economic developments.

What Is Different?

In some respects, the current wave of globalization resembles earlier episodes. There have been occasional periods of intense economic integration over the centuries, most notably during the Roman Empire and in the latter half of the 19th century. These have shared several common features: for example, technological innovations that shrank economic distances (e.g., standardized roads, the telegraph and, more recently, the

[1] For a further discussion, see X. Sala-i-Martin, "The World Distribution of Income: Falling Poverty and … Convergence, Period," *The Quarterly Journal of Economics*. CXXI, no. 2 (May 2006): 351–397.

Not for publication before 18 February 2008
16:05 Eastern Time

Internet) and, very importantly, governments that pursued supportive economic policies. These governments recognized the long-term benefits of economic integration and were large enough to internalize the costs – both political and fiscal – of promoting public goods such as the rule of law; common standards for trade, products, and services; and the liberalization of trade. Many of their decisions, such as the repeal of the Corn Laws in England, were unpopular at the time, but ultimately proved beneficial.[2] We should all hope that similar courage will begin to guide participants in the current Doha Development Round of trade negotiations.

So, is there anything different about this period of integration? I would argue that there are three aspects. First, the sheer scale of the process is unprecedented; second, the relative size of the emerging economies being integrated into the core of the global economy means that their policies matter for advanced economies, as well as for their own; and third, the widespread adoption of supply-chain management by business further enhances the depth of integration.

In terms of scale, it is safe to say that never in history has economic integration involved so many people, both in raw numbers and as a percentage of the global population. For example, when North America and the periphery of Europe were integrated during the latter half of the 19th century, their total population was half the size of the then-advanced countries. The comparable ratio for postwar Japan was 10 per cent. Contrast that with China and India today, which alone represent 2.5 times the current population of advanced countries.[3] Of course, the entire populations of China, India, and other emerging markets are not being instantly integrated into the global economy. If you adjust for the percentage of the population in the traded-goods sector, however, the effective global labour supply quadrupled between 1980 and 2005, with most of the increase taking place after 1990.[4] This trend is set to continue: The globally integrated labour force is projected to double again by 2050.[5]

Similarly, the scale of cross-border flows of goods, services, and capital is now unprecedented. The global economy has opened dramatically – merchandise exports now make up about 20 per cent of global GDP, compared with about 9 per cent at the height of the last great wave of globalization, roughly a century ago.[6] According to research at the OECD, advances in communications technology mean that up to 1 in 5 services are now tradable, although this potential has only just begun to be tapped.[7] Cross-border

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[2] See M. King, Speech at a Dinner for Kent Business Contacts, Ashford, Kent, U.K., 16 January 2006, which cites the example of protests against the use of foreign hops in beer.
[3] For a more complete discussion, see A. Maddison, “World Development and Outlook 1820–2030: Evidence Submitted to the House of Lords” (20 February 2005). Available at <http://www.ggdc.net/maddison/>.
[4] International Monetary Fund, *World Economic Outlook* (April 2007), 162. Each country’s labour force is weighted by its export-to-GDP ratio.
[5] Ibid., 180.
[6] See A. Maddison, *Monitoring the World Economy, 1820-1992* (OECD, 1995) and C. Alexander and K. Warwick, “Governments, Exports and Growth: Responding to the Challenges and Opportunities of Globalisation,” *The World Economy* 30, no.1 (2007), 178.
[7] See D. van Welsun and G. Vickery, “Potential Offshoring of ICT-Intensive Using Occupations,” (OECD, April 2005).

capital flows are now roughly 15 per cent of global GDP, compared with 3 per cent at the turn of the last century.[8]

The second difference that characterizes this wave of globalization is that, given the relative size of emerging markets, their policies matter. For the most part, the economic policies of emerging-market countries have improved the welfare of both their citizens and our own, through the gains from trade. With some policies, however, most notably in the degree of exchange rate flexibility and, by extension, in the conduct of their domestic monetary policies, some emerging markets have run great risks. In particular, they continue to import, what is, for them, overly loose monetary policy that will ultimately lead to adjustments in the real exchange rate through higher domestic inflation, with the attendant economic distortions, adjustment costs, and risk of a hard landing.

Moreover, at the global level, there are important spillovers of these policies onto other economies, such as Canada's. Export-promotion strategies underpinned by undervalued exchange rates are generating unprecedented reserve accumulation, as central banks intervene to forestall exchange rate adjustment.[9] In contrast to earlier periods where emerging markets imported capital to finance investment, today's largest emerging economies are important capital exporters, to such an extent that they have been significant drivers of lower global long-term interest rates. Since the level of long-term interest rates influences risk appetite and capital allocation, the extent to which they are determined by non-market forces can lead to distortions. Indeed, the low level and relative stability of long-term interest rates encouraged investors to "search for yield," which in turn contributed to the dramatic increase in highly structured credit products, including those backed by U.S. subprime mortgages.

The third aspect of today's globalization that is different is the relative novelty of global supply-chain management. Advances in information technologies, specialized production processes, and reduced communication and transportation costs have all led to a whole new range of goods and services becoming tradable. For example, over the past 30 years, the share of imports as a percentage of manufacturing production has tripled to nearly 30 per cent.[10]

These developments mean that firms are now able to increase production efficiency in ways previously unimaginable. In addition to the rising trade in components or intermediate products, an entirely new class of tradable services – including financial, engineering, medical, and legal – has emerged. There is reason to believe that these trends will continue. With these advances, it is easy to imagine a product designed and marketed in Canada, will be assembled in China, using parts sourced from elsewhere in

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[8] See K. H. O'Rourke and J. G. Williamson (1999), *Globalization and History; The Evolution of a Nineteenth-Century Atlantic Economy*, and R. Battellino (2006), *Regional Capital Flows*, a speech to the 6th APEC Future Economic Leaders Think Tank, Sydney, 28 June.

[9] Between the end of 2001 and the end of 2004, global foreign exchange reserves increased by over US$1.6 trillion, reflecting reserve accumulation by emerging-market economies in Asia. See Bank for International Settlements, "Foreign exchange market intervention in emerging market economies: motives, techniques and implications," BIS Papers No. 24 (May 2005).

[10] OECD *Economic Outlook No. 81* (2007), 188.

emerging Asia and supported by technicians in India. By breaking down production processes along a global supply chain, firms are better able to find the efficiency gains that have led to increased productivity and lower prices.[11]

Integration has had a clear dampening effect on the prices of manufactured goods. In effect, technology and globalization are facilitating more widespread application of two of the most powerful forces in economics: the division of labour and comparative advantage. This allows companies to organize the production process in the most cost-effective way possible, which maximizes the likelihood that Canada will retain positions in the high-value-added segments of many industries. A recent analysis by the Conference Board of Canada suggests that, at least with respect to Asian supply chains, Canadian firms could do more to exploit opportunities.[12]

Some Economic Implications of Globalization

At the same time, the rapid increase of manufacturing in emerging markets has led to strong demand for many commodities, and thus, to steady upward pressure on the prices of many of the commodities that Canada produces and exports. The combination of lower prices of our imports and higher prices for our exports means, by definition, an improvement in Canada's terms of trade. Rising terms of trade alone have bolstered real disposable income per capita by 8.5 per cent over the past five years, and have contributed to healthier corporate balance sheets and continued improvement in government fiscal positions.

Canada has adjusted well to the sharp movements in our terms of trade. Through conversations that we at the Bank have had with business leaders, through the responses to questions in our Business Outlook Surveys, and through data showing an average annual increase of 8 per cent in the volume of business investment since 2002, there is clear evidence that the Canadian economy is becoming increasingly oriented to high-end services. Within the goods sector, firms are specializing and concentrating on those areas where they hold a comparative advantage.[13]

Globalization is commonly charged with being responsible for increasing inequality and falling wages in certain sectors of industrialized economies, as lower-skilled jobs are shifted offshore. Indeed, the OECD's 2007 *Employment Outlook* noted that the share of labour income relative to GDP has fallen in a majority of member countries, including Canada, over the past two decades, while in 16 of the 19 countries where data are available, the earnings of workers at the top of the wage distribution have risen relative to earnings of those at the bottom of the distribution since the early 1990s. While globalization has played a role in these trends, the story is much more complex. There is considerable evidence that technological change is behind a large part of the declining

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[11] M. Amiti and S.-J. Wei, "Demystifying Outsourcing." (IMF, 2004). Also, see D. Leung and Y. Zheng, "What Affects MFP in the Long-Run? Evidence from Canadian Industries," Bank of Canada Working Paper No. 2008–4.

[12] The Conference Board of Canada, *Canada's 'Missing' Trade with Asia* (2008).

[13] J. Mair, "How the Appreciation of the Canadian Dollar Has Affected Canadian Firms: Evidence from the Bank of Canada *Business Outlook Survey*," *Bank of Canada Review* (Autumn 2005): 19–25.

ratio of labour income to GDP.[14] Further, labour income in Canada has continued to rise in recent years because of strong employment growth.

What is clear is that globalization has affected the *makeup* of the labour force in many countries by promoting a shift of lower-skilled, labour-intensive production processes to emerging markets and encouraging the growth of higher-skilled, knowledge-based production in industrialized countries. While it is true that this adjustment process can be, and has been, difficult for certain individuals and firms, the overall picture is quite positive. In countries where labour markets are flexible, displaced workers have been more able to re-skill or retrain and, on balance, find more productive employment. Since December 2002, employment in Canada's manufacturing sector has fallen by roughly 14 per cent, or 320,000 jobs, while employment in other goods-producing sectors has risen by roughly 23 per cent, or 382,000 jobs. Further, over the same period, employment in the services sector has risen by more than 1.4 million jobs. Average hourly earnings have increased over this period at an average annual pace of 3.3 per cent. Moreover, everyone in our economy benefits from the lower cost of imports. While Canada's impressive employment performance cannot be ascribed to globalization per se, clearly globalization has not prevented it. At the same time, just as globalization has a long way to run, the adjustment process is far from finished. That is why it is so important for Canada to continue to improve its economic flexibility – a point that has been made repeatedly in Bank of Canada speeches.

Policy Challenges Posed by Globalization

It is plain from this discussion of the economic impact of globalization that it also has important implications for the conduct of monetary policy. I will touch briefly on four implications that are relevant for the Bank of Canada. It should be recognized at the outset, however, that these implications can be conflicting, and none is relentless, so they need to be considered carefully.

First, the Bank needs to be mindful of the possibility that movements in the terms of trade may affect the relationship between core and total CPI inflation. Recall that globalization has led to lower prices for many manufactured goods and higher prices for many commodities, particularly energy products. While both of these groups are represented in the total consumer price index, many energy prices are excluded from our core measure of inflation because of their volatility. In the pursuit of our 2 per cent target for total CPI, we use our core measure as an operational guide because it has been a good gauge of the underlying trend of inflation and has been a better predictor of future changes in the total index than has total CPI itself. Forthcoming research at the Bank of Canada indicates that this relationship continues to hold in Canada, although it has diminished in many other countries.[15] We will continue to monitor the stability of this relationship, and the Bank will also continue to look at a range of measures to assess the underlying trend of inflation. Considerable judgment must always be applied, and no one measure should be relied on exclusively.

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[14] International Monetary Fund, *World Economic Outlook* (April 2007), 161–192.

[15] See Bank of Canada, *Renewal of the Inflation-Control Target – Background Information* (2006) and J. Hoddenbagh, M. Johnson, and E. Santor, "Total and Core Inflation: Recent International Evidence" (Bank of Canada Working Paper, forthcoming).

Second, globalization may affect the degree and speed of the pass-through of exchange rate movements to domestic prices. It is widely believed that globalization acts as a stabilizer that should dampen exchange rate pass-through because the increased competition faced by businesses will lead them to compress their margins to remain competitive and absorb rising costs.[16] Eventually, however, local prices should adjust to exchange rate movements, if they persist. We may, in fact, be seeing this effect here in Canada, since some retailers in the automotive and book sectors have recently adjusted prices downwards in the face of greater competitive pressures stemming from the rise of the Canadian dollar.

Third, globalization may have a conflicting influence on productivity. I have already mentioned how globalization promotes higher productivity by allowing firms to arrange their production processes in the most cost-effective ways. Again, however, the reality in Canada is more complex. The large swings in relative prices fed by globalization have sparked a reallocation of resources between sectors and regions. This reallocation can lead to a temporary slowing in productivity growth as the adjustments take place. This is particularly true in the natural resources sector, where investments typically have long lead times, where a substantial amount of labour has been absorbed, and where high commodity prices have encouraged the production of more marginal resources. These effects may be behind a portion of Canada's disappointing productivity record in recent years.[17]

Fourth, the impact of globalization on market interest rates is an area where economic theory and reality do not quite align. The increase in the effective labour supply in the global economy should have raised the return on investment, all other things being equal, and led to an increased demand for capital to employ this extra labour. This, in turn, would be expected to lead to higher interest rates. As I mentioned earlier, however, long-term interest rates around the world have fallen in recent years, partly because of the exchange rate policies of some emerging markets. There are several other possible explanations for this phenomenon, including the balance of private savings and investment in emerging-market economies, itself the product of the economic policies in these countries.[18]

Given these four effects, some have argued that the large scale of the current globalization is undermining the effectiveness of monetary policy.[19] I disagree. In short,

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[16] There is evidence that import competition dampens markups in Canada. See D. Leung, "Markups in Canada: Have They Changed and Why?" (Bank of Canada Working Paper, forthcoming).

[17] R. Dion, "Interpreting Canada's Productivity Performance in the Past Decade: Lessons from Recent Research," *Bank of Canada Review* (Summer 2007): 19–32.

[18] Bank of Canada research has pointed to the relative weakness of investment demand as more important than the relative increase in desired global savings in explaining the low level of interest rates (B. Desroches and M. Francis, "World Real Interest Rates: A Global Savings and Investment Perspective," Bank of Canada Working Paper No. 2007-16). The research also found that the key factors explaining movements in savings and investment were variables that evolve slowly, such as growth of the labour force and age structure of the population. Other factors may also explain the low interest rates, including the policy choices of some emerging markets and imperfect development of global financial markets.

[19] C. Borio and A. Filardo, "Globalisation and inflation: New cross-country evidence on the global determinants of domestic inflation" (Bank for International Settlements Working Paper, May 2007).

provided that a country retains a flexible exchange rate, it retains control of its monetary policy. The rate of inflation in Canada is a function of the effectiveness of our monetary policy in the face of both global forces and evolving domestic circumstances.

Essentially, the main challenges for monetary policy posed by globalization are: the impact on the growth of our economy's potential output, and changes in relative prices, such as the prices for energy or manufactured products. The growth rate of our economy's potential matters because it affects the balance of supply and demand in the economy. If the effects of these changes are not addressed by monetary policy, they will affect the degree of inflationary pressures in the economy. As for relative price changes, the Bank tries to look through one-off changes, since these only temporarily affect inflation. However, the "temporary" price-level shifts driven by globalization can last a long time, and the pace of the shifts can be variable. It is the job of the Bank of Canada to conduct monetary policy in a manner that takes into account such persistent shocks and ensures that they do not affect inflation expectations.

Recent Economic and Financial Developments

So how have these different factors been affecting the conduct of monetary policy in Canada? Many of the factors just discussed featured prominently in the recent Tokyo meeting of the G–7 finance ministers and central bank governors. Key topics included the slowdown in the U.S. economy and the related tightening of credit conditions in most advanced economies. In addition to outlining a series of measures to improve the functioning of financial markets, my colleagues and I agreed that each country should continue to take fiscal and monetary policy measures appropriate to their particular economic circumstances.

Canada's current economic circumstances were spelled out in the Bank's *Monetary Policy Report (MPR) Update* last month. In that document, the Bank said that the economy has been operating above its production capacity, thanks to strong domestic demand. This demand has been supported by a rise in real incomes, stemming from the gains in Canada's terms of trade which, as I mentioned earlier, have been driven by globalization. The evolution of our terms of trade will depend importantly on demand from major emerging markets. The impact from our terms of trade is one factor that could lead to stronger domestic demand growth than we had assumed. This is something that we at the Bank will continue to watch closely.

Another issue that will continue to be important for us is the evolution of the pass-through to prices of movements in the exchange rate. As I noted earlier, some retailers – notably of motor vehicles and books – have adjusted prices downwards in the face of greater competitive pressures stemming from the rise of the Canadian dollar. In the *MPR Update*, the Bank said that we expect this to be a one-off movement in prices, but there is a possibility that there could be greater and more persistent downward pressure on prices than we assumed.

The Bank also identified the downside risk that the tightening in credit conditions could be greater and more protracted than assumed. As well, there could be a more prolonged slowdown in the U.S. economy, exerting a greater drag on Canadian GDP growth and inflation. These two risks are, of course, related.

In line with our base-case projection and the associated risks, the Bank lowered the target for the overnight rate by one-quarter of one percentage point on 22 January. This followed a similar reduction on 4 December, and brought the Bank's key policy rate to 4 per cent. In making the announcement in January, the Bank said that further monetary stimulus is likely to be required in the near term to keep aggregate supply and demand in balance and to return inflation to target over the medium term. As I said recently, the timing and degree of that stimulus will be determined at future fixed announcement dates, after we have conducted a thorough analysis of, and applied our judgment to, all information available to us at that time.

Conclusion

Let me conclude with some brief thoughts about how policy-makers in general should approach the issue of globalization. There are tremendous benefits from embracing this integration of markets, but there are adjustment costs as well, in the form of exposing our economies to global competition and swings in relative prices.

The challenge for policy-makers is to ensure that the benefits of globalization are maximized and widely shared. In general, this means making sure that policies do not frustrate market-based adjustments, but rather are aimed at promoting flexibility in markets – particularly labour markets. This means maximizing the ability of workers to relocate if they wish, maintaining appropriate social safety nets that do not discourage employment, and focusing on lifelong learning and training. Beyond labour markets, governments should focus on domestic integration. The Trade, Investment and Labour Mobility (TILMA) pact between British Columbia and Alberta is a good example. Internationally, governments should also concentrate on removing barriers to trade and investment to maximize the benefits of globalization. These imperatives will be tested during the current economic slowdown.

From the Bank of Canada's perspective, our challenge is to understand the various ways in which globalization affects both financial stability (a topic for another speech) and inflation. At the Bank, we will continue to share our perspectives on globalization and other broader trends so that individual Canadians, companies, and governments have the necessary context when making their savings and investment decisions. Finally, in light of the growing importance of global forces and the risk of negative spillovers from the policies of some emerging markets, we will continue to use our participation in international fora to shape global institutions and national policies so that globalization can fulfill its promised benefits for all.