The potent combination of globalization and the Information Technology (IT) revolution is expected to transform the lives of many people over the next quarter of a century. Jeremy Rifkin predicts that “our way of life is likely to be more fundamentally transformed in the next several decades than in the previous one thousand years. By the year 2025, we and our children may be living in a world utterly different from anything human beings have experienced in the past.” Douglas Robertson adds that the computer is the most important invention in the history of technology and “history has never seen a revolution on the scale of the one that is being triggered by computer technology.” Kevin Kelly insists that the “network economy will unleash opportunities on a scale never seen before on Earth.”

All of these predictions may contain a rich dose of hyperbole, but significant change is certainly on the horizon, and one must judiciously ask how well federalist systems around the world are prepared to cope with these changes. Brazil will be a major actor in this process as it ranks as the world’s fifth most populous nation and one of the top ten economic powers. It is also the third largest federation in the world in terms of population.
and GDP and the fourth largest territorially, and will certainly continue to play a predominant role on the South American continent in general and within the Mercosul customs union in particular.\[5\] The 1990s was widely considered as “the decade of reforms” within Brazil, but the magnitude of reforms experienced during the past decade may pale in comparison to the reforms which will occur domestically and internationally over the next 25 years.\[6\]

The Globalization Challenge

In an “international” economy best exemplified by the period from 1870 until 1914, almost all production takes place within discrete national markets which are linked through cross-border trade and portfolio investment, with the national market retaining its role as the basic unit in the international system. In the “global” economy which dates from the early 1990s, the scale of technological innovation and implementation has driven the limits of markets well beyond those of nation-states, and electronically integrated networks are gradually replacing traditional modes of organizations as the pivotal players in international economic transactions. Unprecedented technological change, combined with the emergence of almost 40,000 transnational corporations (with the top 400 alone accounting for one-half of global private-sector output), has resulted in a world where national borders remain very important, but are no longer the totally dominant unit of economic accounting.\[7\] As Thomas Friedman asserts, globalization “is the overarching international system shaping the domestic politics and foreign relations of virtually every country, and we need to understand it as such.”\[8\]

In addition to the economic sector, “globalization” or at least “regionalization” is occurring in many other sectors as well. Residents of modern nation-states are increasingly vulnerable to decisions made or events which transpire outside the borders of their home countries. Governments within individual nation-states can no longer singlehandedly find and implement workable solutions to environmental, energy, and resource problems linked to global warming, ozone deterioration, air and water pollution, the depletion of fish stocks and fossil-based fuels, and a host of other problem areas. National boundaries are almost totally irrelevant within cyberspace, and increasingly so for organized crime and international terrorism. Solutions to these and other major challenges will require far greater cooperation among national governments in order to safeguard and enhance the well-being of their citizens.\[9\]

In the economic arena which will be the primary focus of this paper, the international mobility of goods, services, capital, technology, and people stands at record levels, and the world is becoming far more integrated than ever before. World trade in goods and services is approaching seven trillion dollars annually, and is growing at a rate almost three times faster than the aggregate growth in national economies. In addition, the growth in commercial services, international direct and portfolio investment, and international tourism is easily outpacing the expansion in merchandise trade. For example, trans-border merger and acquisition activity added up to a record 798 billion dollars in 1999, an increase of almost 50 percent from what were the record levels of 1998.

The most explosive growth has occurred in international currency markets. Daily money
flows across national borders were in the range of 20 billion dollars in 1973, 820 billion dollars in 1992, and over 1.5 trillion dollars in 1998. Only two weeks’ worth of these exchanges is needed to finance the annual flows of goods, services, and direct investment, so most of this activity is based on short-term speculation. Furthermore, liquid financial assets held by private sources may exceed 80 trillion dollars by the end of this year, more than twice the combined annual GDPs of all the nations in the world. A good share of these liquid assets will be employed as “hot money” to chase investment opportunities around the world, and this facet of globalization is perhaps most troublesome to the leaders of national governments. Hot money helped to exacerbate the Asian crisis of 1997 and the Russian crisis of 1998, and contributed directly to Brazil’s financial upheavals of 1999. During the height of the Asian crisis, the rapid exodus of investment funds resulted in the Thai and South Korean currencies losing half of their value, and the Malaysian and Philippine currencies being trimmed by 40 percent. Volatile movements in currencies, even in an era of “euroization” and “dollarization,” can have a significant spillover effect on companies and workers in countries such as Brazil, as exports become less competitive in nations suffering from devaluations, whereas imports from these countries may crowd out locally made products because of their lower prices.

In referring to “globalization,” Dani Rodrik has suggested that depending “on who uses it, the term denotes an opportunity, an imperative, a source of anxiety, or at worst a curse.” Revolutionary advances in communications and transportation are increasingly negating the importance of distance, space, and national boundaries. The dominance of market systems around the world, when combined with extensive deregulation and privatization, has also eroded the role of governments in protecting and enhancing the interests of their constituents. For example, with the growth in the internationalization of production, transnational corporations can easily shift jobs to countries with lower unit-labor costs or which provide other special advantages, but workers who previously held these jobs are not themselves transferred; rather, they often wind up on the unemployment line. As a concrete illustration, more than 100 U.S. firms now outsource their software code cutting to sites in India, where the work is completed and then returned overnight through electronic networks. In all U.S. industries, perhaps up to four million “virtual aliens” are employed abroad and are connected via electronic telecommunications networks. These foreign-based workers may improve the competitiveness of individual U.S. companies, but they do not pay taxes within the United States and they may adversely affect the job prospects for U.S. residents. Richard Longworth refers to globalization as “a revolution that enables any entrepreneur to raise money anywhere in the world and, with that money, to use technology, communications, management, and labor located anywhere the entrepreneur finds them to make things anywhere he or she wants and sell them anywhere there are customers.” This new world of globalization in the twenty-first century may place an inordinate burden on government officials, because in spite of rising economic interdependence and interconnectedness, voters still expect that employment opportunities will increase, taxes will remain at current levels or even decrease, and that social-welfare programs will be adequately funded.
Federalism and Globalization

Federations divide authority constitutionally among national and over 350 subnational government units such as states, provinces, cantons, länder, and autonomous republics. Often, a federal system was adopted in the first place to placate the desire for a degree of autonomy among the constituent units, to take into account the exigencies found in huge territorial expanses, or, more commonly, to compensate for diversity or cleavages in a variety of areas. In the end, some are not successful in containing these centrifugal forces, as manifested by the disintegration of federal systems in the former USSR, Yugoslavia, and Czechoslovakia.

In an era of globalization, subnational governments in several federations have decided that they must be actively engaged in the international sector in order to protect the interests of their local constituents. In most federal systems, international trade, investment, and tourism now represent a record percentage of overall jobs. For example, upwards of 18 million jobs are directly linked to the international economy in the United States, or roughly 1 in 6 full-time jobs in the private sector, and in Canada the number is 1 in 3. Indirectly, tens of millions of additional jobs are tied to the international economy because import penetration is at record levels and local companies must compete in their own domestic marketplace against goods and services originating abroad. Indeed, in the so-called New Economy, the nearest business competition is now less than one second away, the time it takes for a signal in cyberspace to traverse the planet. Because such a large percentage of subnational government revenues is generated from local business activity, these governments consider that it is imperative to be engaged both nationally and internationally.\[16\]

Secondly, the intrusiveness of the international level onto the local level is also prompting activism on the part of subnational governments in federal systems. In an age of interdependence, Joseph Schumpeter’s notion of capitalism as “creative destruction” is more appropriate than ever before. Between 1980 and 1997 in the United States, 74 million jobs were created and 44 million disappeared. The net creation of 30 million jobs is quite impressive, but some human tragedies were inextricably linked to the 44 million jobs which were terminated. Perhaps up to one-third of all jobs in the United States are in a state of flux each year, either being recently created, terminated, or significantly altered.\[17\] Globalization and rapid technological change also combine to have an uneven effect on businesses and regions. For example, among the Fortune 500 companies listed in the United States in 1955, 70 percent no longer exist.\[18\] Detroit has lost 70 percent of its manufacturing jobs since its peak productive years of the 1960s, whereas employment in Silicon Valley has increased by almost 1000 percent over the past two decades.\[19\] With many subnational governments in federations having primary responsibility for business regulation, unemployment programs, and social-welfare functions, they must deal on a daily basis with this turbulent creative destruction in an era of globalization. In addition, international or regional agreements entered into by their national governments, such as membership in the World Trade Organization (WTO), the European Union (EU), the North American Free Trade Area (NAFTA), or Mercosul have also intruded into areas of responsibility constitutionally mandated to these subnational governments. This
intrusiveness limits policy prerogatives at a time when state, provincial, länder, or other subnational governments are increasingly engaged in a range of activities which often overlap the local, national, and international arenas.

The expansion of subnational government involvement in the international arena is impressive. In the United States, 4 states maintained offices abroad in 1970, compared with 42 states and Puerto Rico which currently operate 180 foreign offices in almost 30 different countries. Many governors and big-city mayors lead at least one international mission annually, and state governments are allocating about 100 million dollars per year to their international programs, in addition to pledging billions of dollars in grants, loans, or tax holidays to foreign companies setting up subsidiary operations on American soil. Proportionally, the Canadian provinces have more offices opened overseas and spend appreciably more on international programs than their counterparts in the United States. German länder, Swiss cantons, and Australian states are among the other subnational governments in federations which have been actively engaged in international activities, as well as some subnational governments in unitary systems such as France and Japan. In all likelihood, these international pursuits sponsored by subnational governments will increase in the future, a reflection of their own growing professionalism and revenues, their continued concern with representing the interests of their local constituents, the steady proliferation of “intermestic” issues that have both domestic and international implications, and the inextricable march toward globalization and regionalization exemplified by the WTO, EU, NAFTA, and Mercosul.

Intergovernmental Relations and Globalization

There are certain disadvantages facing federations in an era of globalization that might not face unitary systems of government where authority is concentrated at the national level. First of all, subnational activism abroad may make it more difficult for the nation-state as a whole to speak with “one voice” in the foreign policy arena. Ottawa has had its share of disagreements with the government of Quebec over international representation, and the current Parti Québécois (PQ) government is pushing for some form of representation in such international bodies as the World Trade Organization and UNESCO. Indeed, a recent PQ working paper suggests “why fight over Quebec’s place in Canada, when the real debate from now on will be about Quebec’s place in the world?” Massachussets has attempted to place sanctions on trade with Burma (Myanmar), California and New York City levied sanctions against two Swiss banks until they reached an acceptable settlement on the allocation of assets belonging to Holocaust victims, and various cities in the United States continue to impose economic sanctions on selective nation-states. In almost all cases, the national government has opposed these subnational government edicts and warned that they weaken the ability of Washington to conduct foreign affairs. Other weaknesses linked to federalism may include (1) the lack of intergovernmental cooperation in addressing solutions to the challenges of globalization, (2) the duplication of international programs, (3) intensive and costly competition among subnational governments to entice foreign corporations to their areas of jurisdiction, (4) the lack of national standards in a variety of important areas, including liability laws, fiduciary responsibilities, environmental regulations, etc., (5) subnational protectionism and other
barriers which impede the free flow of goods, services, and workers within the federation, thus hindering local companies in their efforts to become internationally competitive, (6) frequent skirmishing in the field of fiscal federalism, and (7) periodic disputes involving which level of government is best equipped to tackle a broad range of problem areas. Globalization may also accentuate national unity problems in fragile federations on the precipice of disintegration.

On the other hand, federal systems may have certain advantages over their unitary counterparts in adapting to the challenges of globalization. Their extensive experience in intergovernmental relations has equipped them to interact with national and subnational governments abroad. Moreover, regional and municipal governments in federations usually have a much better grasp than their national governments of local conditions and what needs to be done to enhance the well-being of their constituents. They also have the authority, flexibility, and often the fiscal resources to implement experimental programs, which, if successful, can be replicated by other subnational entities within their federation. Constant competition among these subnational governments to provide conditions conducive for economic development also affords little room for complacency and fosters a need for continuous innovation. Ideally, this flexibility and creativity will be accompanied by a strong commitment to national economic union and the absence of trade and other types of barriers that impede exchanges among the federated units themselves. The Federative Republic of Brazil certainly faces formidable challenges in preparing to compete effectively in an era of globalization and the emergence of the New Economy. Even though it ranks as one of the major nations in the world in terms of population and GDP, Brazil is still on the periphery in a world where so much income and wealth continues to be concentrated in the northern tier of nations. Domestically, the concentration of income and wealth in the hands of relatively few Brazilians is also among the very highest in the entire world.

Production and population in Brazil are also skewed heavily in favor of the Southeast region, with the state of São Paulo alone responsible for 35 percent of GDP and almost 50 percent of all industrial production. In addition, the high-tech sector is still heavily concentrated in São Paulo, with secondary corridors found in some of the cities running from Belo Horizonte to Porto Alegre. In the United States, there is nothing equivalent to the domination of São Paulo within Brazil. California, Texas, and New York together are responsible for only 28 percent of national GDP. On the other hand, this regional concentration of production in Brazil is certainly not unique among federal systems. Ontario alone is responsible for over 41 percent of Canada’s GDP and 52 percent of the production of manufactured goods. The Federal District and state of Mexico also produce a third of all the GDP within the nation of Mexico. Moreover, the concentration of GDP and industrial production in the state of São Paulo has actually decreased over the past two decades, although most of this economic activity has gone to other parts of the Southeast region.

Without any doubt, more intergovernmental consultations and collaboration will be needed in Brazil if the federal system is to take advantage of the many opportunities and to minimize the negative effects of globalization. In the United States, many important
studies have been completed on the rise of Silicon Valley and the success of smaller “technopole” centers in areas such as Boston, San Diego, Seattle, Portland, Austin, the Research Triangle of North Carolina, Salt Lake City-Provo, and Northern Virginia.\[24\]

What can the federal, state, and local governments in Brazil learn from these studies in terms of forming high-tech clusters, encouraging business partnerships with local universities and research institutions, facilitating venture-capital activities, etc.? How can Brazil improve its rating in terms of the World Economic Forum’s list of eight factors of overall economic competitiveness: openness, finance, technology, labor, government, infrastructure, management, and institutions? The New Economy will also have dramatic effects on the Old Economy, including agricultural production and manufacturing. What must be done in Brazil to optimize performances on the farm and on the shop floor? How can the public sector keep its best and brightest employees in an era when high wages and fringe benefits are being offered by private businesses? How can Brazil avoid a “brain drain” to the north where North American and European countries currently have millions of unfilled positions in their high-tech enterprises? Can entrepreneurship grow rapidly in Brazil and how can a world-class information highway be developed which will take full advantage of an age of digitization, wireless communication, and the Internet? Can Brazilian culture be protected in an era of Americanization of popular culture and an Internet world where 75 percent of Internet content originates in the United States and more than 95 percent of the on-line content is in English?\[25\] Even though high-tech clustering will be concentrated initially in the Southeast, how can it spread to disadvantaged regions, especially those in the North? In other words, can businesses succeed in the disadvantaged areas, thus permitting local workers to remain at home instead of migrating to the major Southeast cities? Bill Gates has predicted that the business sector will change more over the next decade than over the past 50 years.\[26\] Are Brazilian businesses able to modernize with a minimum of government red tape and regulation? What are the success stories of state and municipal governments in Brazil, and can they be replicated elsewhere in the country? Are state and local governments the “laboratories of democracy and economic development” in Brazil, and if not, why not?

Have cooperative arrangements been made between state and local governments in Brazil and their counterparts in other federations, and what seems to work and what seems to be a waste of time and resources?

As we proceed through the first decade of the new century, the odds are very high that the trend toward globalization will intensify and that the interconnectedness of local, national, and international economies will solidify. This is not to imply that borders are irrelevant (especially in terms of the exchange of goods), because trade within borders, measured in terms of distance and economic size, is still greater than cross-border trade.\[27\] Nevertheless, further global and regional trade and investment liberalization linked to the WTO, EU, NAFTA, Mercosul, the proposed Free Trade Area of the Americas, and other international accords will most certainly close the gap between the flows of domestic and international commerce, with trade among nations exceeding commerce within nations by as early as 2015.\[28\]
Governmental units within Brazil and other federations must ask themselves what are acceptable institutional and procedural guidelines for fostering an effective interaction among all levels of government, the business and labor sectors, and other pertinent groups in the private sector. Each state should develop its own strategic plan to maximize the benefits and minimize the costs of globalization and the IT revolution, much as the province of Alberta in Canada and other subnational government units in federal systems have already done.\[29\] Representatives of municipal governments must also be actively engaged in the process, because most federations are highly urbanized and larger cities, in the words of Saskia Sassen, are “a new geography of centrality and marginality.”\[30\] This means that many of the best-educated and highly skilled people who can take full advantage of globalization are concentrated in major metropolitan areas, but it also means that many of those least prepared, such as the impoverished, school dropouts, recent immigrants, and disadvantaged minority groups are often clustered within large urban agglomerations. This intergovernmental dialogue must deal with a host of issues linked to globalization and the well-being of local citizens, including (1) an educational system geared to the Information Age, (2) worker training and retraining commensurate with rapid technological change, (3) the development and maintenance of a world-class infrastructure, (4) new social-welfare strategies which adapt to demographic and globalization trends, (5) reasonable tax and regulatory climates which enhance business competitiveness while at the same time permitting governments to protect the basic needs of their citizenry, and (6) widespread respect for the rule of law and the elimination of graft and corruption.

The following aptly summarizes what is occurring in many parts of the world, and what is currently facing Brazil both now and in the foreseeable future: “The information technology revolution has expanded well beyond the cutting-edge high-tech sector. It has shaken the very foundations of the old industrial and occupational order, redefined the rules of entrepreneurship and competition, and created an increasingly global marketplace for a myriad of goods and services. In short, a New Economy has emerged. Yet while economic reality is fundamentally changing, much of our public policy framework remains rooted in the past.”\[31\]

“Think globally and act locally” has been the traditional rallying cry for subnational governments in federal systems to be actively engaged in the international arena. Within federations, this rallying cry can either be quite productive or somewhat disruptive, depending on who is allowed to participate and whether or not the interaction among governments is generally cooperative or generally confrontational. As Peter Drucker emphasizes, “all institutions have to make global competitiveness a strategic goal. No institution, whether a business, a university or a hospital, can hope to survive, let alone to succeed, unless it measures up to the standards set by the leaders in its field, anywhere in the world.”\[32\] In Brazil, the key to future success will be continued openness to the market system, bold short-term and long-term strategic planning, effective intergovernmental cooperation among the federal government, the 26 state governments, and the nearly 5,000 municipalities to modernize and globalize the infrastructure and educational systems, and finally, extensive public-private sector collaboration which avoids the pitfalls of cronynism and domination by narrow-minded special interests.

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In the New Economy, emphasis is placed on knowledge, innovation, decentralization, entrepreneurship, venture capital, free trade, consumer preferences, life-long learning and training, and speed of execution. An information-based economy diminishes the importance of size, distance, and location, and helps what were once remote areas in the northern tier of nations to compete much more effectively against more prominent regions that are often situated along coastlines or major waterways. Ideally, this shift in emphasis will also benefit the periphery of nations as they compete against the so-called “core” nations. Thus, a key case study over the next quarter of a century will be Brazil for three major reasons: its major global status in terms of GDP, population, and territorial size; its prominence as a leader among emerging markets in the “periphery;” and its federal structure and how well prepared it is to bring greater prosperity to the Brazilian people in all corners of this vast nation-state.

Endnotes

[1] Some of this paper has been adapted from my presentation on “Globalization and Its Impact on Federations” at the Mont-Tremblant Conference of the Forum of Federations, October 7, 1999.


[5] Among federal systems, only India and the United States have a larger population, only the United States and Canada have larger nominal GDPs, and only Russia, Canada, and the United States have larger territories.


[9] In their article entitled “New World, New Deal,” W. Bowman Cutter, Joan Spero, and
Laura D’Andrea Tyson issue the following warning: “Tension is mounting between the fixed geography of nation-states and the nonterritorial nature of global problems and their solutions.” See Foreign Affairs, March/April 2000: 80.


[16] As Andrew S. Grove, co-founder of the Intel Corporation, has pointed out, “long distances used to be a moat that both insulated and isolated people from workers on the other side of the world. But every day, technology narrows that moat inch by inch. Every person in the world is on the verge of becoming both a coworker and a competitor to every one of us, much the same as our colleagues down the hall of the same office building are.” See his book, Only the Paranoid Survive (New York: Currency Book, 1996), 5.


[18] Neef, A Little Knowledge, 10.


Quoted in the Gazette (Montreal), 16 April 1999 (Internet), from The Sovereignty of Quebec in the Era of Globalization.


Ibid.

I especially recommend the work of AnnaLee Saxenian on Silicon Valley, but numerous other studies on the development of technology clusters are also available, with some having been posted on the Internet. In the United States, relevant studies conducted by the National Governors’ Association, the Council of State Governments, and the National League of Cities are readily accessible to representatives of Brazil’s state and local governments.


Bill Gates, Business @ the Speed of Thought (New York: Warner Books, 1999), xiii.

As Gary Hufbauer, John Helliwell, and other economists have pointed out using the so-called gravity model, the density of merchandise trade between New York City and Chicago, Rio de Janeiro and Sao Paulo, and the provinces of Quebec and Ontario, may still be at least ten times greater than their respective trade flows across international boundaries. See Hufbauer, “the Trade and Investment Regime.”


