

Inter-National and Intra-Country Economic Integration: The Case of China*

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Intra-country market segmentation and urban-rural income disparity are undeniable indications of disintegration of a national economy. Inter-national economic integration has resulted in issues of intra-country economic integration being largely neglected in current research. China is a case in point. As China joins the World Trade Organization (WTO) and becomes increasingly integrated with the world economy, anecdotal evidence shows that markets are still internally segmented in the country. This paper provides a measure of national and international economic integration from the perspective of the level of the firm. It analyzes the importance of urbanization in national economic integration in the context of the current globalization trend. One key argument is that urbanization through free labor mobility is an unavoidable necessity for any economy seeking to survive and prosper in an increasingly competitive international environment.

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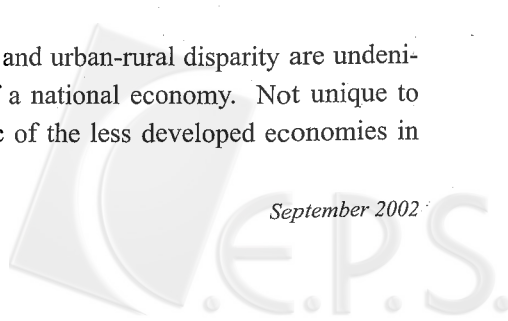
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The literature on globalization and integration is both enormous and growing. Yet, there is surprisingly little attention paid to domestic market integration in today's mainstream economic literature. Words and phrases like "globalization" and "international integration" have become so commonplace that people are led to believe that each individual country is already an integrated market and that the only thing left on the economic agenda is to integrate into the world economy through trade and financial liberalization. Is it in fact true that the world has moved beyond national economic integration and is now focusing on international economic integration? Is national economic integration a prerequisite for international economic integration? Answers to these questions are crucial both for our understanding of the world economy and for the formulation of strategic economic policies.

Anecdotal evidence on the Chinese economy suggests that the Chinese market is not a highly integrated one. Indeed, there exist many segmented local markets rather than one large, integrated market in China. There are many reasons for such domestic market segmentation including the strong power of local governments, regional cultural differences, labor immobility, lack of adequate economic infrastructure, and information barriers. Regional economic disparity is both a result and cause of market segmentation.

In tandem with market segmentation and regional disparities, there is a wide gap, by almost every measure, between the living standards of the urban and rural areas in China. While the urban areas in general are becoming increasingly exposed to the outside world and are following the tide of international integration, much of the rural population follows a still very backward way of life.

Regional market segmentation and urban-rural disparity are undeniable indications of disintegration of a national economy. Not unique to China, it is a common characteristic of the less developed economies in



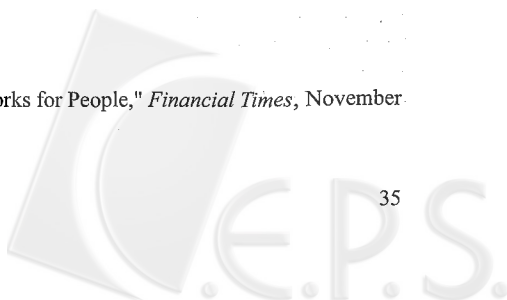
the world. In fact, national economic integration is an important measure of a country's economic development.

The importance of national economic integration has been illustrated by Lawrence Summers: "In the U.S., the later years of the 19th century taught us that closer integration between states called for more common rules-setting at the national level, to prevent state governments undermining each other's efforts at promoting fair taxes and labor standards."¹ The fact that economic research and policy analysis focus more on international economic integration rather than national economic integration exemplifies how mainstream economic research parallels the economic development of the world's more advanced economies. Yet as international economic integration presses ahead, the issue of national economic integration surges on both the economic and political agendas of many developing countries.

While both national and international economic integration may contribute to national economic development and people's general welfare, national economic integration is of paramount importance to a country as long as differences in national interests exist. A fragmented national market may not be able to reap the claimed benefits of globalization or international economic integration.

The purpose of this paper is to analyze inter-national and intra-country economic integration and explore the possible connections between the two. The analysis adopts a microeconomic approach to describe measures of economic integration in domestic and international markets. An economy's regulatory environment, infrastructure, and level of economic development are among the factors that affect a firm's business coverage and economic integration. The emphasis is on the importance of urbanization in national economic integration in the context of globalization. Urbanization through free labor mobility is an urgent necessity for economies wishing to survive and prosper in an increasingly competitive international

¹Lawrence Summers, "A Trade Round That Works for People," *Financial Times*, November 29, 1999, 17.



environment. It is necessary because urbanization provides the institutional infrastructure for an integrated and growing economy. It is urgent because delays in the urbanization process may leave the country in a situation in which some locales are highly integrated with the world market but the national economy is severely divided between regions and between urban and rural areas.

The paper is organized as follows. The first section reviews definitional concepts of economic integration. The second section provides a description of how national and international economic integration can be measured from the perspective of the firm. The third section alerts the reader of the coexistence of international economic integration and domestic market segmentation; this phenomenon is prevalent in many developing countries. In the fourth section, emphasis is placed on the importance of urbanization for national economic integration. The conclusion offers some policy recommendations on economic integration.

Economic Integration: Some Conceptual Discussion²

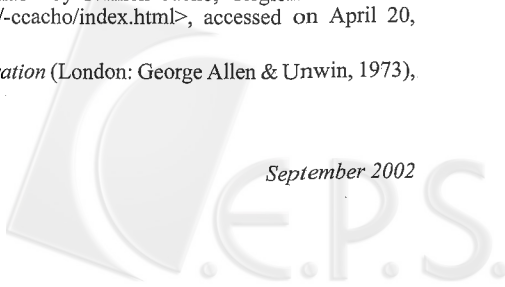
The existing literature on economic integration suggests that the concept of economic integration applies mostly, if not solely, to inter-national integration. Economic integration is seen as either a process, a combination of state and process, or a means toward an end.

Integration as a Process

As a process, integration means the removal of discrimination between different states.³ Integration has been regarded as the process of the progressive removal of discrimination that exists along national borders.

²This section is based on literature made available by Carmen Cacho, "Regional Economic Integration" (1998), at <<http://www.du.edu/~ccacho/index.html>>, accessed on April 20, 2001.

³Bela Balassa, *The Theory of Economic Integration* (London: George Allen & Unwin, 1973), 1.



Bernard Mennis and Karl Sauvart have stated that "integration is a process whereby boundaries between nation-states become less discontinuous, thus leading to the formation of more comprehensive systems. Economic integration consists in the linking up and merging of the industrial apparatus, administration, and economic policies of participating countries."⁴ Some authors even include the speed of the integration process. For example, Willem Molle regards integration as the process of gradual elimination of economic frontiers between countries.⁵ According to Molle, at the first stage, the traffic in goods among partners is liberalized. This stage is followed by the liberalization of the movement of production factors. Co-ordination of national policies, with regard both to economic sectors and such aspects as the exchange rate, is the objective at the third stage.

Works on economic integration have also described the end stage of the integration process. According to John Pinder, "integration is a process towards union and economic integration is the removal of discrimination between the economic agents of the member countries and the creation and implementation of common policies."⁶ The evolution of the former European Common Market may exemplify this process and the integration that this process has brought about. Others depict economic integration as a process of developing a system and order. Margarita Maksimova views economic integration as "a process of developing deep and stable relationships about the division of labor between national economies."⁷ This process is aimed at "the formation of international economic entities, within the framework of groups of countries with the same type of socio-economic system, which are consciously regulated in the interest of the ruling classes of these countries."⁸

⁴Bernard Mennis and Karl P. Sauvart, *Emerging Forms of Transnational Community* (Lexington: Lexington Books, 1976), 75.

⁵Willem Molle, *The Economics of European Integration* (Aldershot: Dartmouth, 1991), 5.

⁶John Pinder, "Problems of European Integration," in *Economic Integration in Europe*, ed. Geoffrey Denton (London: Weidenfeld and Nicolson, 1969), 143-45.

⁷Margarita Maksimova, "Comments on Paper: Types of Economic Integration by B. Balassa," in *Economic Integration Worldwide*, ed. Fritz Machlup (London: Macmillan., 1976), 33.

⁸Ibid.

Integration as a State and/or a Process

As a state, integration means the absence of different forms of discrimination.⁹ Non-discrimination and price equalization are the essence of this state. Dennis Swann regards economic integration as "a state of affairs or a process that involves the combination of previously separated economies into larger arrangements."¹⁰ In these arrangements, like the World Trade Organization (WTO) and its predecessor the General Agreement on Tariffs and Trade (GATT), the fundamental principle is equal treatment or non-discrimination among member states. Based on standard international trade theories, free trade across nations should lead to factor and product price equalization. Indeed, Franklyn Holzman factually equates free trade and economic integration in saying that "[e]conomic integration is a state in which the prices of all similar goods and factors in two regions are equalized."¹¹ From a dynamic point of view, particularly in studies of international financial markets, markets are considered integrated if stock prices in different national markets have a tendency to move together.

Integration as a Means

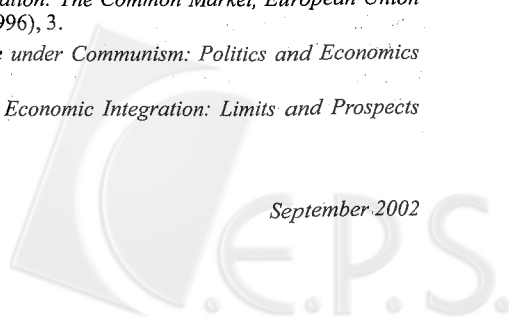
A major difference in policy implications between the mercantilist views on trade and classic trade theories is that the former perceive trade as a zero-sum game whereas the latter see mutual benefit in free trade. Whatever the arguments there may be, national interest (or national welfare as more often used in economic literature) is at the core of analysis. Trade is a means to improve one's national welfare. Likewise, economic integration has also been seen as one of the means for an increase in welfare.¹² Similarly, Peter Robson regards economic integration as a means to obtain

⁹See note 3 above.

¹⁰Dennis Swann, *European Economic Integration: The Common Market, European Union and Beyond* (Cheltenham: Edward Elgar, 1996), 3.

¹¹Franklyn D. Holzman, *International Trade under Communism: Politics and Economics* (New York: Basic Books, 1976), 59.

¹²Miroslav N. Jovanovic, ed., *International Economic Integration: Limits and Prospects* (London: Routledge, 1998), 8.



efficiency in resource use.¹³ Therefore, "full integration" should involve the free movement of factors of production as well as the free movement of goods and an absence of discrimination.

Stages or Levels of Economic Integration

Based on the literature of economic integration and historical experiences, there are four main types of economic integration: the free trade area, customs union, common market, and economic union. These types of integration may be viewed as stages if one considers integration as a process, or as levels if one considers integration as a state. According to Thomas Pugel and Peter Lindert,¹⁴ there are four main types of regional arrangements toward increasing economic integration:

(1) *Free trade area*, in which members remove trade barriers among themselves, but keep separate national barriers against non-member countries. Examples include the European Free Trade Area formed in 1960 and the North American Free Trade Area (NAFTA) which officially began in 1994.

(2) *Customs union*, in which members again remove all barriers to trade among themselves but adopt a common tariff against imports from non-member countries. The European Economic Community (EEC) from 1957 to 1992 included a customs union along with some other agreements. The Southern Common Market (MERCOSUR), formed by Argentina, Brazil, Paraguay, and Uruguay in 1991, is actually a customs union.¹⁵

(3) *Common market*, in which members allow full freedom of factor flows (migration of labor or capital) among themselves in addition to having a customs union. Despite its name, the Europe Common Market was not truly a common market until 1992 as substantial barriers to international movement of labor and capital were still in existence before then.

¹³Peter Robson, *The Economics of International Integration* (London: George Allen and Unwin, 1987), 1.

¹⁴Thomas A. Pugel and Peter H. Lindert, *International Economics*, eleventh edition (Boston: Irwin/McGraw-Hill, 2000).

¹⁵*Ibid.*, 214.

(4) *Economic union*, in which member countries unify all their economic policies—including monetary, fiscal, and welfare policies—as well as policies toward trade and factor migration. Most nations are economic unions.¹⁶ Belgium and Luxembourg have had such a union since 1921. The European Union (EU) is on a path toward full unity.

Carmen Cacho added a fifth stage or level of economic integration: (5) *political union*, in which countries agree to common policies in almost every sector, including foreign and defense policy.¹⁷ The demands for economic integration might lead to growing political integration as the governments of the member states work together more closely. Pressure then would grow to create a political union.

The five stages or levels of economic integration may be viewed as a continuum from a free trade arrangement to a full economic and political union among nations. In fact, this continuum can be extended from both ends. There are many formal and informal groupings among nations before formal agreements of free trade are reached. The Asia-Pacific Economic Cooperation (APEC) forum was initiated in November 1989 at a ministerial meeting held in Canberra, Australia. The forum's efforts focus on the development and adoption of concrete steps to achieve free trade and investment in the Asia-Pacific region by the year 2020.¹⁸ In more recent years, summits of the Americas have been held to discuss the creation of a free trade zone across nearly the entire Western Hemisphere (with Cuba as the exception) by 2005. The arrangement would strike trade barriers across the Americas from the Arctic Circle to Cape Horn—a region that is home to 800 million people. In addition, the leaders of thirty-four American countries at the 2001 Quebec summit adopted declarations supporting improved education, health care, and participation in democratic institutions.¹⁹

¹⁶Ibid.

¹⁷See note 2 above.

¹⁸Dennis R. Appleyard and Alfred J. Field, Jr., *International Economics*, third edition (Boston: Irwin/McGraw-Hill, 1998), 375.

¹⁹CNN, "Protests Delay Start of Americas Summit," April 20, 2001, available at <http:

The extension from the other end of the economic integration continuum requires more envisioning. Where should economic integration eventually lead to? Will the entire world follow a path of free trade, free mobility of factors of production, economic union, political union, cultural union, and human union? Indeed, how people envision the future world bears significantly on today's government policies and individual behavior.

Some Measures of Economic Integration

There is no doubt that there are voluminous discussions of the term "globalization" and one can readily argue for the difference between "economic integration" and "(economic) globalization." One convenient distinction between the two terms is in scope. Economic integration may be used to describe cooperative economic arrangements among a small or a large number of countries, whereas globalization is more or less representative of the entire world. Indeed, economic integration is often referred to as "regional" economic integration as most of the current integration arrangements are confined to specific regions in the world. While these integration arrangements prompt free trade and free mobility of factors of production, they discriminate against non-members. Therefore, these arrangements are often criticized as a form of regionalism. On the other hand, regional cooperative arrangements may be expanded in geographical coverage to become more "global." The proposed Free Trade Area of the Americas has been called a "logical extension" of NAFTA.²⁰ In this sense, progressive economic integration may lead to globalization.

Many studies in the vast international trade and finance literature either explicitly or implicitly measure economic integration or globalization. Price equalization of similar products in different national markets

[//www.cnn.com/2001/WORLD/americas/04/20/summit.americas.04/index.html](http://www.cnn.com/2001/WORLD/americas/04/20/summit.americas.04/index.html)> (accessed on April 20, 2001).

²⁰CNN, "Americas Summit Closes as Leaders Back Free Trade," April 23, 2001, available at <<http://www.cnn.com/2001/WORLD/americas/04/22/summit.americas.04/index.html>> (accessed on April 23, 2001).

and the co-movement of prices in different national financial markets are among these measures. Others include equality or disparities in per capita income among the world's nations.²¹

This paper proposes yet another measure of economic integration and globalization, one which focuses on the economic activities of individual firms. Of the three main types of economic agents in an economy—households (consumers), firms, and the government, firms are the most active. Households and the government do not move across national borders as much as firms do in their economic activities. A firm's business coverage within a nation and across borders, therefore, should provide an interesting measure of economic integration.

The use of market coverage of an individual firm as a measure of economic integration or globalization can find support in the literature on economic integration. One of the stylized facts of the development of the global economy is the concentration of manufactures.²² It can be argued that the concentration ratio for a firm or for a combination of firms is higher in a more integrated national economy and in a more globalized world.²³ Indeed, Fritz Machlup stated that the term "integration" in economics was first used in industrial organization to refer to combinations of firms.²⁴ Horizontal integration refers to linkages of competitors, while vertical integration means the unification of suppliers and buyers.²⁵ Both horizontal and vertical integration will increase the size of the resultant firm and its market coverage.

Suppose a particular firm, firm i , can sell its products or service in M potential markets in a particular country, country j . A potential market is defined as a place where the presence (as represented by products, services,

²¹See M. Shahid Alam, *Poverty from the Wealth of Nations: Integration and Polarization in the Global Economy since 1760* (London: Macmillan, 2000), for discussions of international economic integration and polarization in the global economy since 1760.

²²Ibid., 1.

²³Concentration ratio is often defined as the share (e.g., in sales or value-added) of a particular number of firms in the entire market/industry.

²⁴Fritz Machlup, *A History of Thought on Economic Integration* (London: Macmillan, 1979), 3.

²⁵Jovanovic, *International Economic Integration*, 5.

or other commercial existence) of the firm or its competitors is needed. The specific boundaries of the markets are firm- or industry-specific and may vary or change with market conditions. For example, every local residential community may be viewed as a potential market for the service of a McDonald's restaurant. On the other hand, the potential market for Boeing's large commercial aircraft may have to be measured at the national level. Given these discussions, a firm's business coverage of its potential markets in a particular country can be presented as:

$$C_{ij} = \frac{P_{ij}}{M_{ij}}$$

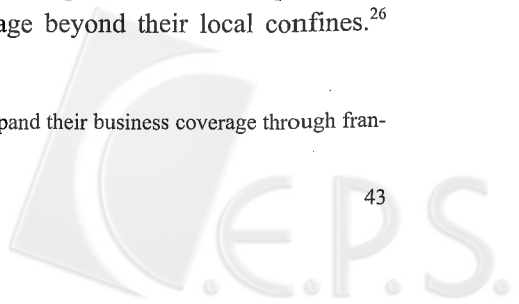
where P_{ij} is number of markets where firm i is present and M_{ij} is the number of potential markets for firm i in country j . C_{ij} reaches one (i.e., unity) when the firm has presence in every potential market. The significance of C_{ij} is its indication of country j 's national economic integration. The firm cannot achieve market unity if there are insurmountable market barriers between different potential markets.

The magnitude of C_{ij} , or the degree of national economic integration as measured by firm i 's business coverage, depends obviously on the maturity of the firm. A normal firm requires time to grow and expand beyond the base where its business is initiated.

The magnitude of C_{ij} should also depend on a country's overall economic development. A more developed economy provides the necessary infrastructure, overall business environment, and financial market support for firms to grow and expand.

The magnitude of C_{ij} can be affected by geographical restrictions in certain industries. Some of these restrictions are due to the nature of the firm's business while others are set by administrative policies. A great many traditional services are local in nature, such as hairstyling, dry cleaning, and medical care. It is difficult, if not impossible, for firms providing these services to have business coverage beyond their local confines.²⁶

²⁶One may argue that even these services can expand their business coverage through fran-



Financial services like commercial banking are not subject to the same spatial limitations. In the United States, however, each state has the right to set its own rules on intrastate branch banking. This regulation was established in the McFadden Act passed by the U.S. Congress in 1926. This rather outdated legislation was intended to prevent large banks from expanding geographically and thereby forcing out or taking over smaller banking entities, possibly threatening competition.²⁷ There are some states, called "unit-banking states," where banks cannot establish branches state-wide. These geographical limitations on branch banking understandably increase the number of banks while decreasing the geographical coverage of each establishment, thus reducing C_{ij} .

In a country where internal markets are separated and segmented by mutual isolation, firm activities are confined to their specific locales. As a result, the number of firms in most industries tends to be large, yet the size of each individual firm is fairly small, thus lowering the average C_{ij} .

In practice, the number of potential markets for each firm may be difficult to measure. The appropriate level of administrative jurisdictions or zoning localities may be used as a close proxy for specific firms. For example, the potential markets for McDonald's fast food and for most consumer products in the United States may be approximated by the number of postal codes or postal offices.²⁸ The number of potential markets for automobiles and other durable goods may be measured by the number of counties, with a survey of the presence of each firm in its corresponding proxy territories yielding a measure of its geographical coverage and thus

chising or setting up branches throughout a country. Such franchising or branching may require standardization of the products or services involved, however, which may prove to be difficult, as evidenced by the lack of prevalence of such arrangements in the real world.

²⁷ Frank J. Fabozzi and Franco Modigliani, *Capital Markets: Institutions and Instruments*, second edition (New Jersey: Prentice Hall, 1996), 49.

²⁸ As of June 30, 2002, McDonald's had 30,464 restaurants in 121 countries, of which slightly fewer than half—between 13,000 and 15,000—were located in the United States (see <<http://www.mcdonalds.com/>>, accessed on October 19, 2002). As of August 9, 2002, the United States had 27,863 postal offices (U.S. Postal Services: Financial and Operating Statements, Accounting Period 12, PFY2002, see <<http://www.usps.com/>>, accessed on October 19, 2002). McDonald's businesses cover approximately one-half of its potential market as measured by the number of postal offices.

providing an indication of economic integration. People will not be surprised to find that the C_{ij} for McDonald's is very high in the United States. In fact, C_{ij} for most of the brand-name companies in the United States should be very high as the United States is considered a highly integrated market.²⁹

One may doubt the validity of these individual business coverage measures as a measure or indication of economic integration, arguing that the C_{ij} 's for different firms in the same industry can be very different. It is true that these differences are very often reflections of different firms' competitive positions in the market rather than an indicator of market integration. Yet a leading firm's C_{ij} represents the general environment that allows a certain degree of market integration within a national economy. A composite measure of national economic integration may be defined as:

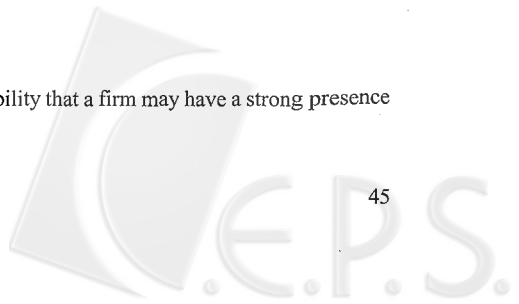
$$I_j = \frac{1}{N} \sum_{m=1}^N C_{m,j}$$

where N is the number of industries in country j , and $C_{m,j}$ is the leading firm's C_{ij} in a particular industry. Here a leading firm refers to the one that has the highest C_{ij} in an industry. A country reaches full economic integration when I_j attains the value of one. It is important to note, however, that the structure of an economy must be considered in employing this measure of economic integration. In a highly regulated economy, for instance, common rules-setting at the national level may lead to a highly integrated economy even if a separate firm serves each different location in the country. In this case, all firms are quasi-branches of a big corporation—the national government.

The level of international economic integration (or globalization) as seen from a particular firm is simply an extension of the national measure:

$$G_i = \sum_{j=1}^W C_{i,j} \quad 0 < G_i < W$$

²⁹The discussion here does not rule out the possibility that a firm may have a strong presence in more than one industry.



where W is the total number of countries in the world. If G_i is greater than one, an obvious inference is that the firm has at least some international presence.³⁰ If G_i approaches W , the firm is literally a global one. Much of the previous discussion about C_{ij} also applies to G_i except for the international context. As liberalization in trade, investment, and services presses on, firms in the most competitive positions in the world will be able to crack national barriers and to penetrate more markets. This is an important force that drives economic integration and globalization. It is now reasonable to assert that many well-known multinational firms have achieved a G_i score that is not far away from W . This is particularly true in high-tech industries.

Correspondingly, an overall measure of globalization (for the entire world) may be presented as:

$$G = \sum_{i=1}^N G_i \quad 0 < G < NW$$

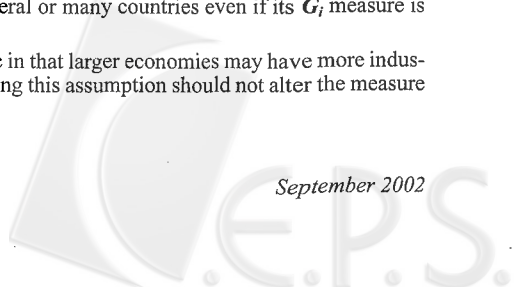
where G_i is the leading firm's G_i in a particular industry. The underlying assumption for the expression is that every country has the same number of industries.³¹ The ultimate measure of globalization, NW , is the product of the number of countries and the number of industries in the world. The process of economic integration or globalization will make the products or services of the most competitive firms in the world available in more and more national markets.

The Coexistence of International Economic Integration and Intra-Country Market Segmentation

One basic assumption of the classic international trade theories is

³⁰Of course, a firm can have presence in several or many countries even if its G_i measure is less than one.

³¹This assumption may not be highly realistic in that larger economies may have more industries than do smaller ones. However, relaxing this assumption should not alter the measure of globalization.



that there is free mobility of factors of production within a nation but immobility across national borders. Thus international trade is based on the implication that the national market is already integrated. An integrated national market is a necessary condition for the efficient allocation of productive resources within a nation.

However, the assumption of free mobility of factors of production within national boundaries does not seem to be consistent with the stylized facts of economic disparities within many nations. These disparities include regional disparities and differences between urban and rural areas in per capita income and other measures of living standards within a nation. Based on classic trade theories, free trade across nations can equalize factor and product prices; similarly, free mobility of factors of production within a nation ensures equalization of wages and capital returns within the same nation. Why do people in low-income areas not move to more advanced areas? Why do people in rural areas not migrate to urban areas so as to improve their standard of living? Obviously there must be some hindrance to full mobility of factors of production and a lack of full market integration in the economy.

International trade has a long history, as do economic disparities within nations; the coexistence of international economic integration and national market segmentation is not a new phenomenon. Yet the trend of international economic integration or globalization gained unprecedented momentum in the last decade of the twentieth century. With the collapse of the former Soviet Union, the strong push for a global market economy led to a sweeping torrent of trade and financial liberalization throughout the world, with mostly the developing countries bearing the brunt of ever-mounting pressure. In tandem with this trend, there were efforts to institutionalize economic integration and globalization. Among these efforts were the establishment of the WTO and the proposal for a new international financial architecture. These developments have provided a more favorable global environment for multinational firms to extend and expand their businesses all over the world. While manufacturing multinationals will continue to increase their global business coverage, the General Agreement on Trade in Services (GATS) under WTO, which came into force in

January 1995, has paved the way for multinationals in the service industries to integrate into more markets around the world. These services encompass banking, insurance, accountancy, telecommunications, and transportation. As claimed by the WTO, "It is impossible for any country to prosper today under the burden of an inefficient and expensive services infrastructure."³² Not surprisingly, the measure of international economic integration, G_i , for many multinational firms has significantly increased toward the end of the twentieth century and will continue to increase. The more comprehensive measure of globalization, G , has also increased and will continue to increase. Global economic integration has been assisted by agreements within the WTO.³³

The increased business presence of multinational firms has been particularly evident in China. Browsing the web sites of major economic and developments zones (areas) in China, one can easily find boasts of the number of multinational companies that have undertaken investment in their respective zones. Getting connected to the world economy has become the buzzword in China and it seems that one way to achieve this goal is to provide preferential policies to attract foreign investment. Foreign investment has been deemed a driving force in China's economic growth ever since China adopted the reform and opening-up policy in late 1978.

The most phenomenal change in the Chinese economy during the reform period is the transformation of the market structure. During the years of a planned economy, every industrial production unit in every locality could be regarded as a branch or subsidiary of a central government agency or department. If these central government agencies and departments were regarded as headquarters of their nationwide production units and operations, then the measures of economic integration (i.e., C_{ij} and I) had mostly attained unity. So one must have considered the Chinese economy to be highly integrated, or more integrated than most market economies at the time. As is known to all, however, such a high level of integra-

³²WTO, GATS: Fact and Fiction: Why is the Liberalization of Services Important?" available at <http://www.wto.org/english/tratop_e/serv_e/gats_factfiction2_e.htm>.

³³Martin Wolf, "In Defense of Global Capitalism," *Financial Times*, December 8, 1999.

tion was based on state monopoly. The network of state monopoly in most industries has been torn down under the economic reforms of the last two decades. Village and township enterprises have sprung up like wildfire across China's coastal areas. The economic growth in the non-state sector has significantly surpassed that of the state sector. State-owned enterprises have more recently become a focal point in China's economic reform.

As people in and out of China hail China's economic achievements, a careful observer would note that the Chinese market/economy is not fully integrated. This is evidenced by the paucity of domestic firms able to extend their business coverage across most markets within China. The many thriving small and medium-sized firms have limited access to markets beyond their respective starting localities. Even many large state-owned enterprises, now being severed from their former state network systems, have lost much of their previous business coverage area in China. As compared with the market structure in industrial countries, China has a vast collection of small and medium-sized firms with very few conglomerates whose businesses can span all over China and/or have established significant presence in overseas markets. The measure of integration for most Chinese firms, C_{ij} , and for the overall economy, I , are therefore presumably small.

The lack of dominance by large firms in China's market stands in sharp contrast to the high concentration ratios of U.S. firms. Table 1 shows trends in the share of value-added manufacturing by the top 50, 100, 150, and 200 largest manufacturing companies in the United States. Although no comparable statistics are available for China, industry survey data published by China's State Statistical Bureau should shed some light on concentration ratios in China. In 1995, 23,007 industrial firms that were categorized as large or medium-sized enterprises, totaling about 0.3 percent of all enterprises and production units in China, produced 39.6 percent of all the industrial value-added goods in China.³⁴ In contrast, as depicted in table 1, the 200 largest firms in the United States produced over 40 percent

³⁴Data is from the Third National Industrial Survey, China State Statistical Bureau, 2001, available at <<http://www/stats.gov.cn/tjgb/gypcgb/qggypcgb/200203310150.htm>>, accessed on October 4, 2002.

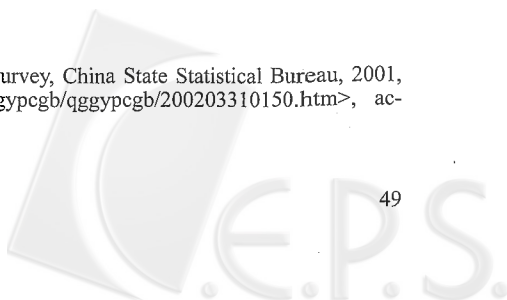


Table 1**Share of Value Added by Manufacture**

(Accounted for by the 50, 100, 150, and 200 Largest Manufacturing Companies, %)

Year	50 Largest	100 Largest	150 Largest	200 Largest
1947	17.0	23.0	27.0	30.0
1954	23.0	30.0	34.0	37.0
1958	23.0	30.0	35.0	38.0
1962	24.0	32.0	36.0	40.0
1972	25.0	33.0	39.0	43.0
1982	24.0	33.0	39.0	43.0
1992	24.0	32.0	38.0	42.0
1997	24.0	31.7	36.9	40.7

Sources: U.S. Department of Commerce: *1982 Census of Manufactures*, volume 1; *1992 Census of Manufactures*: Concentration Ratios; *1997 Economic Census*: Concentration Ratios.

of all value-added for manufactured goods in the United States since 1962. The 200 largest U.S. firms constituted about 0.06 percent of the total number of companies in 1997. The 200 largest U.S. firms produced a proportion of their industry's value-added in 1997 that required over 20,000 firms in China to accomplish the same feat in 1995.

The lack of dominance of nationally recognizable large firms in the Chinese economy is evidence of economic disintegration in China. One plausible explanation is that the emergence of leading companies in an industry takes time. After all, only about twenty years have passed since China's economic reform began. However, a congenial economic environment is crucial for a star firm to expand its business throughout the country. Market access may be denied to a firm from another locality through either explicit administrative restrictions or via local culture. Anecdotal evidence shows that barriers of market access by non-local firms and of labor mobility exist in at least some provinces and municipalities in China. Such barriers include, for instance, registration restriction for vehicles not produced by local firms and regulations against employing non-local residents in certain local industries.

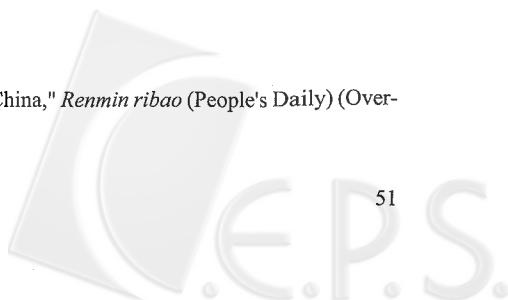
The drive for international economic integration in China has made

many multinational firms and products prevalent in China's local markets. In the meantime, few domestic firms have broken through their local market confines. As a result, many multinational firms and their products enjoy a more integrated market in China than do domestic firms in corresponding industries. Many U.S. products have dominating market shares in China. According to a 1997 market survey, Motorola cellular phones, Coca Cola beverages, and Kodak film are among the American companies that have captured more than 40 percent of the market share in their respective markets in China.³⁵

How should one explain the dominance of multinationals in China's markets? For multinational firms, product superiority and skilled management have rendered unchallenged advantages in many cases. Domestic firms, particularly non-state-owned companies, have a relatively short history and have not yet attained their full potential. However, that the Chinese government has preferential policies for foreign companies has also contributed to the dominance of multinational firms. In addition, pre-established consumer perceptions favor foreign goods over domestic products.

The presence (and the dominance) of multinational firms in China is indicative of China's integration in the world economy. On the other hand, the fact that the majority of Chinese firms are being confined to their local markets reveals the disintegration of Chinese markets. The coexistence of international economic integration and intra-country market disintegration reflects the current stage of China's economic development—a situation that will likely persist for the foreseeable future. Yet continued disintegration in the presence of globalization may pose severe challenges to sustainable economic growth and stability in Chinese society. One can hardly imagine that a country could maintain a viable and consistent economic system when part of the country is being integrated with the outside world while the rest is being left behind.

³⁵"Consumption Survey of Urban Residents in China," *Renmin ribao* (People's Daily) (Overseas edition), December 22, 1997.



Many have claimed that international economic integration *a la* joining the WTO may help introduce competitive mechanisms to China. Such membership will provide incentives and pressure for Chinese firms to become more efficient and competitive. Nevertheless, the playing field may not be level for some domestic firms. First, they are not starting from the same level as the multinationals. Second, they may not receive the same preferential treatment that multinational companies have enjoyed. Obviously the fate for China's domestic firms is either to prosper or to perish. Domestic firms form a country's base for sustainable economic growth and long-term stability. Therefore, it is important that a sufficient number of domestic firms survive international competition—and emerge stronger.

The Importance of Urbanization for National Economic Integration

While a leading firm's market coverage in a particular industry measures a country's internal economic integration, intra-country per capita income parity (or disparity) provides an alternative indication of a country's economic integration. Intra-country parities are often measured across regions within a country or between urban and rural areas.

Table 2 presents per capital income distribution in the United States in 1998. The District of Columbia and Connecticut were the top earners while West Virginia and Mississippi were among the lowest. While the gap between the top and the bottom seems to be fairly large (Mississippi's per capita income is about 53 percent of that of the District of Columbia), the standard deviation of per capita income across states was only about 15 percent.

The regional and urban/rural disparities in China are more pronounced, as shown in table 3, which presents both urban and rural per capita income distributions across provinces and municipalities in 1998. Guangdong (廣東) and Shanghai (上海) ranked the highest in urban per capita income. The per capita income for Shanxi (山西) and Gansu (甘肅), on the other hand, was less than half of those at the top of the list. The

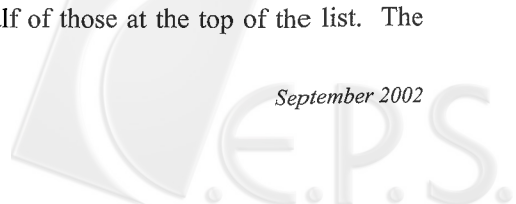


Table 2
U.S. Per Capita Income, 1998
(in U.S. dollars; comparison in ratios)

State	Income	Comparison	State	Income	Comparison
District of Columbia	37,714	1.00	Texas	25,803	0.68
Connecticut	37,452	0.99	Kansas	25,687	0.68
New Jersey	34,310	0.91	North Carolina	25,454	0.67
Massachusetts	33,394	0.89	Missouri	25,403	0.67
New York	32,236	0.85	Indiana	25,182	0.67
Maryland	30,850	0.82	Wyoming	24,927	0.66
Illinois	29,974	0.79	Iowa	24,844	0.66
Colorado	29,860	0.79	Vermont	24,803	0.66
Nevada	29,806	0.79	Tennessee	24,576	0.65
New Hampshire	29,679	0.79	Arizona	24,133	0.64
Delaware	29,571	0.78	South Dakota	23,797	0.63
Minnesota	29,503	0.78	Maine	23,529	0.62
Washington	28,632	0.76	North Dakota	22,767	0.60
Virginia	28,343	0.75	South Carolina	22,544	0.60
California	28,280	0.75	Kentucky	22,353	0.59
Rhode Island	28,012	0.74	Louisiana	22,352	0.59
Alaska	27,904	0.74	Utah	22,294	0.59
Pennsylvania	27,358	0.73	Oklahoma	22,199	0.59
Florida	26,930	0.71	Alabama	22,123	0.59
Michigan	26,807	0.71	Idaho	21,923	0.58
Hawaii	26,725	0.71	Montana	21,324	0.57
Wisconsin	26,245	0.70	Arkansas	21,260	0.56
Ohio	26,164	0.69	New Mexico	21,178	0.56
Georgia	26,134	0.69	West Virginia	20,246	0.54
Oregon	25,958	0.69	Mississippi	20,013	0.53
Nebraska	25,861	0.69	United States	27,322	0.72

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

standard deviation for China's urban per capita income in 1998 was about 26 percent. For the rural areas, the standard deviation for per capita income was even higher—a staggering 40 percent, with the lowest income (Tibet 西藏) being only 23 percent of the highest (Shanghai). China's urban area per capita income was 2.52 times that of rural areas on average. In places like Yunnan (雲南, 4.40), Guizhou (貴州, 3.43), Chongqing (重慶, 3.19), and Shaanxi (陝西, 3.02), urban area per capita income is more than three



Table 3
Per Capita Income in China: 1998
 (in Chinese *yuan*; comparison in ratios)

Region	Urban	Rural	Urban/Rural Ratio	Urban Comparison	Rural Comparison
Guangdong (廣東)	8,904.83	3,527.14	2.52	1.00	0.65
Shanghai (上海)	8,825.26	5,406.87	1.63	0.99	1.00
Beijing (北京)	8,520.61	3,952.32	2.16	0.96	0.73
Zhejiang (浙江)	7,883.77	3,814.56	2.07	0.89	0.71
Tianjin (天津)	7,126.23	3,395.70	2.10	0.80	0.63
Fujian (福建)	6,544.81	2,946.37	2.22	0.73	0.54
Yunnan (雲南)	6,100.26	1,387.25	4.40	0.69	0.26
Jiangsu (江蘇)	6,064.45	3,376.78	1.80	0.68	0.62
Chongqing (重慶)	5,487.49	1,720.46	3.19	0.62	0.32
Hunan (湖南)	5,474.55	2,064.85	2.65	0.61	0.38
Guangxi (廣西)	5,440.55	1,971.90	2.76	0.61	0.36
Shandong (山東)	5,414.17	2,452.83	2.21	0.61	0.45
Sichuan (四川)	5,159.97	1,789.17	2.88	0.58	0.33
Hebei (河北)	5,116.12	2,405.32	2.13	0.57	0.44
Xinjiang (新疆)	5,041.67	1,600.14	3.15	0.57	0.30
Hainan (海南)	4,895.39	2,018.31	2.43	0.55	0.37
Hubei (湖北)	4,849.43	2,172.24	2.23	0.54	0.40
Anhui (安徽)	4,798.76	1,863.06	2.58	0.54	0.34
Liaoning (遼寧)	4,646.41	2,579.79	1.80	0.52	0.48
Guizhou (貴州)	4,580.48	1,334.46	3.43	0.51	0.25
Inner Mongolia (內蒙古)	4,389.44	1,981.48	2.22	0.49	0.37
Heilongjiang (黑龍江)	4,291.76	2,253.10	1.90	0.48	0.42
Jiangxi (江西)	4,274.32	2,048.00	2.09	0.48	0.38
Qinghai (青海)	4,257.50	1,424.79	2.99	0.48	0.26
Shaanxi (陝西)	4,243.76	1,405.59	3.02	0.48	0.26
Henan (河南)	4,238.49	1,864.05	2.27	0.48	0.34
Jilin (吉林)	4,223.91	2,383.60	1.77	0.47	0.44
Ningxia (寧夏)	4,146.37	1,721.17	2.41	0.47	0.32
Shanxi (山西)	4,117.79	1,858.60	2.22	0.46	0.34
Gansu (甘肅)	4,034.26	1,393.05	2.90	0.45	0.26
Tibet (西藏)	...	1,231.50			0.23
National Total	5,458.34	2,161.98	2.52	0.61	0.40

Source: *Zhongguo tongji nianjian 1998* (Statistical yearbook of China, 1998).

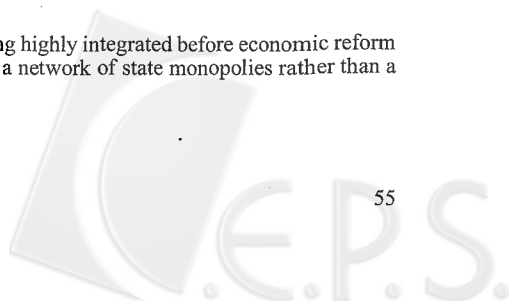
times that of the rural areas. The urban/rural disparity in the coastal areas is relatively smaller (e.g., Shanghai 1.63, Jiangsu 江蘇 1.80, Zhejiang 浙江 2.07). It is interesting to note that the three provinces in China's north-east (Jilin 吉林 1.77, Liaoning 遼寧 1.80, and Heilongjiang 黑龍江 1.90) are among the areas in China that have the smallest urban/rural disparity. Does this mean that these places are more urbanized than most other places or that these places have a different economic structure? These are questions worthy of further exploration.

A casual economic comparison between China and the United States reveals that urbanization and economic integration are essentially synonymous in a competitive market environment.³⁶ Like economic integration, urbanization may be viewed as a process, a state, or a means. As a process, the term means the removal of barriers to resource mobility, exchange, and communication between rural and urban areas, and eventually the removal of differences between rural and urban areas. As a state, it means equity and equality in employment, business operation, and social benefits. As a means, it is to achieve an ever-increasing level of economic welfare for the nation. A highly urbanized economy should also be a highly integrated economy.

While national economic integration will definitely improve a country's national welfare, the contribution of international economic integration to a particular country's welfare cannot be taken for granted. In a study of integration and polarization in the global economy since 1760, Shahid Alam stated that the asymmetric developments in the global economy during the two hundred years ending in the 1950s were shaped by "unequal races" and unequal states. According to Alam, the evolution of the global economy during that time period was defined by four stylized facts: (1) relentless polarization, (2) international integration, (3) spatial concentration of manufactures, and (4) concentration of power.³⁷

³⁶The Chinese economy may be regarded as being highly integrated before economic reform (as discussed earlier), yet this integration was a network of state monopolies rather than a competitive market.

³⁷Alam, *Poverty from the Wealth of Nations*, 1.



There are no strong indications that these facts have changed much over the last half a century. However, globalization may impose a new test to the integrity of a country's national economy. If a country's economy is disintegrated geographically, parts of the country's market may be integrated with the rest of the world while other parts are still isolated. It should be noted that a disintegrated economy is characterized by not only barriers in regional trade, but also by immobility of labor and residence. This disintegration not only hinders commerce between regions within a country, but also blocks communication among people in different regions, between different ethnic groups, and between people in different religious beliefs. Obviously, the risk is beyond just economic. The breakdown of the former Soviet Union and the disintegration of other countries in the last decade or so should have provided sufficient lessons for a country whose markets, including labor markets, are disintegrated.

Policy Implications and Further Research

The foregoing discussions of economic integration and existence of intra-country market segmentation in China have a number of policy implications. While these implications are derived from observations on China, they should have implications for other developing countries as well.

Centralized rules-setting to eliminate intra-country market barriers: Centralization is crucial for a country's economic integration and for more efficient participation in globalization. As the U.S. experience has indicated, closer integration between different regions and localities calls for more common rules-setting at the national level, in order to prevent local governments undermining each other's efforts toward a fair and competitive but unified market. Firms will be able to extend and expand their business coverage in and to all potential markets, taking advantage of economies of scale and improving efficiency. Enhanced competition will also benefit consumers as prices are driven down.

A politically integrated country cannot have an economy that is sig-

nificantly separated and disintegrated. While the United States is considered one of the freest countries, if not *the* freest, in the world, the federal government of the United States has enormous power over the country's economy and great capacity to mobilize the country's economic resources. For example, income tax (both individual and corporate), by far the largest category in U.S. tax revenue, is collected and allocated (or expensed) by the federal government. Many corporate and business laws and regulations are set at the federal level in the United States.

Free labor mobility and equal opportunity: Urbanization should allow free mobility of labor within the nation. Freedom of labor mobility ensures the efficient allocation of human resources while increasing overall labor productivity; promotes communication, exchange, and technical innovation; reduces local cultural barriers and eliminates prejudices caused by isolation; and lowers transaction and production costs.

Residents should be allowed to choose where to live, where to work, and when to move. There should be no discrimination in education, employment, and residence for every citizen. In addition, free labor mobility will gradually rid people of attachment to their localities and promote a common identity. Many people in the rural areas have been confined to their local "tribes" and are not exposed to the changing world beyond their localities. In this sense, mobility itself is an education.

Elimination of regional and local barriers in trade and business: Regional barriers are not consistent with urbanization. Urbanization cannot achieve its highest efficiency if it is coupled with regionalism or localism. "Opening to the inside" is at least as important as opening to the outside world. Business and investment policies should be based on the merits of the firm, but not on its geographical origin. Domestic firms should be given equal treatment in business opportunities. China's accession to the WTO should not only present an opportunity for China to become more integrated into the world economy, but also provide a level playing field for domestic firms as well as international firms.

Growth of firms: The growth and expansion of firms are the driving force for urbanization. Labor mobility provides a competitive labor market for firms. As new firms are established and existing firms expand, more

people are employed. The various economic and development zones formed in the last two decades in China are a good start for China's urbanization.

The contribution of large enterprises to a country's urbanization and economic integration cannot be overly emphasized. In some industrial countries, these enterprises have offices and production facilities in many parts of their home countries. These firms are thus able to mobilize labor, capital, and technology resources across the country, or throughout the world for some multinationals. Many local towns and communities have been established because of the presence of these companies.

Infrastructure improvement: Economic integration requires facilitating infrastructure. Difficulties of transportation due to natural barriers contributed to the isolation of many parts of China in the past. A well-developed national transportation network has been at the core of the domestic economic integration of many industrial countries. In addition to transportation, the development of information technology and an efficient communication network are also prerequisites of intra-country and international economic integration.

Centralized rule-making, free labor mobility, and improvement in infrastructure are all interrelated policies that are necessary in urbanization, domestic economic integration, and effective participation in globalization.

Future research: The discussions and the proposed measure of economic integration may lead to a number of areas for future research. One of the hypotheses of the discussions is that leading firms in more developed countries have higher business coverage due to a higher degree of intra-country economic integration. This hypothesis can be empirically tested through appropriate survey design and data collection. Mergers and acquisitions are a very common approach for firms to expand and extend their market coverage. One may investigate the impact of mergers and acquisitions on inter-national and intra-country economic integration. Concentration ratios have been used in this paper to illustrate market coverage and market integration for the United States. Further research is needed to justify both theoretically and empirically the use of such ratios for firms' market coverage and economic integration.