



The **10 TRAITS** *of*
GLOBALLY FLUENT
METRO AREAS

INTERNATIONAL EDITION

BROOKINGS

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GLOBAL CITIES INITIATIVE
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Cities, trade, and mobility invent and reinforce each other. Metropolitan areas around the world have a rich and accelerating record of global economic engagement. While some have been immersed in globalized transactions for centuries, others are just beginning their own international journeys and experiments. Today, different cities worldwide have distinct rationales for initiating cycles of global engagement and seeking a path toward global fluency.

This report is precisely for those world cities that are beginning a new phase of international orientation. It aims to provide insights for three kinds of metropolitan cities that are forging their own new approaches toward the opportunities and challenges in a globalizing economy where the larger share of world output is now produced by emerging economies:¹

- **Established cities in developed nations** which must confront new economic realities—aging societies, insufficiently diversified economies, high infrastructure burdens, rising immigration, competition from other maturing regional markets, and new patterns of trade and investment.
- **Larger cities in emerging economies** that must now play the primary mediating roles for their nations and regions, acting as hubs and junction boxes for new global interactions, as the world economy's centers of gravity shifts eastwards and southwards.
- **Cities recovering from long-term political turmoil or "regime change,"** and which have become more open to globalization after a generation or more when their national politics and international engagement were constrained by totalitarianism, conflict, instability or corruption.

For these three kinds of cities there are several essential ingredients that comprise global fluency:

- **Global fluency is the level of global understanding, competence, practice, and reach a metropolitan area exhibits in an increasingly interconnected world economy.** This fluency facilitates progress toward a desired economic future. A high level of global fluency better enables a city to optimize the benefits of globalization and minimize its challenges. The more globally fluent metropolitan areas and firms become, the better they will be able to influence and control their own destinies, sustain their economic positions, maintain or increase competitiveness, and manage the downsides of globalization.
- **The path to global fluency is, like learning a new language, neither quick nor easy.** It takes favorable macroeconomic conditions, intentional efforts, and smart policies to move a region along a spectrum—from globally aware, to globally oriented, to globally fluent—over the course of decades. Metropolitan areas achieve global fluency by first inheriting particular assets and attributes over the long-term, then being intentional about attuning them to international markets, and later by adjusting their assets and cluster strengths to respond to new opportunities.

➤ **Changing global dynamics have created an imperative for the world's metropolitan areas to engage globally like never before.** Despite a recent slowing of the pace of growth in leading emerging nations, as much as 70 percent of global GDP growth through 2025 will still occur in these markets—including Brazil, India, and China. Prominent cities in these higher-growth regions need to manage demand from global visitors, firms, and investors, procure foreign expertise in engineering and infrastructure, and welcome international talent, culture, and science. At the same time, cities in developed countries can no longer rely on existing trade and immigration patterns to achieve growth, and must expand their reach into unfamiliar territory. Intensified global competition threatens every city's economy, but it also provides a platform for many more small and mid-size cities to tap into growth opportunities abroad.

➤ **Many of the world's metropolitan areas find themselves unintentionally internationalized, or find themselves trapped in adverse national or regional path dependencies.** For these cities, their challenge is to shake off enduring habits and become more intentionally engaged in productive global networks. National frameworks and macroeconomic trends of course constrain how this task can be pursued, but nevertheless city and metropolitan leaders can make a decisive impact on their regions' global competitiveness. Their roles in steering local education, infrastructure maintenance, conducting research and development, pursuing trade and investment relationships, and aligning the resources of different government tiers are all critical. There are now more incentives for cities to internationalize and more ways to prepare for and manage the positive and negative consequences of globalization.

➤ **The 10 traits of globally fluent metropolitan areas provide an important framework for metropolitan leaders to gauge their global starting point.** The 10 traits listed below have proven to be particularly strong determinants of a metropolitan area's ability to succeed in global markets, manage the negative effects of globalization, and better

secure its desired economic future. The most successful cities are those that have a long-term outlook and achieve some level of integration between many of the traits.

- 1 **Leadership with a Worldview** - Local leadership networks with a global outlook have great potential for impact on the global fluency of a metropolitan area.
- 2 **Legacy of Global Orientation** - Due to their location, size, and history, certain cities were naturally oriented toward global interaction at an early stage, giving them a first mover advantage.
- 3 **Specializations with Global Reach** - Cities often establish their initial global position through a distinct economic specialization, leveraging it as a platform for diversification.
- 4 **Adaptability to Global Dynamics** - Cities that sustain their market positions are able to adjust to each new cycle of global change.
- 5 **Culture of Knowledge and Innovation** - In an increasingly knowledge-driven world, positive development in the global economy requires high levels of human capital to generate new ideas, methods, products, and technologies.
- 6 **Opportunity and Appeal to the World** - Metropolitan areas that are appealing, open, and opportunity-rich serve as magnets for attracting people and firms from around the world.
- 7 **International Connectivity** - Global relevance requires global reach that efficiently connects people and goods to international markets through well-designed, modern infrastructure.
- 8 **Ability to Secure Investment for Strategic Priorities** - Attracting investment from a wide variety of domestic and international

sources is decisive in enabling metropolitan areas to effectively pursue new growth strategies.

- 9 **Government as Global Enabler** - National, state, and local governments have unique and complementary roles to play in enabling firms and metropolitan areas to “go global.”
- 10 **Compelling Global Identity** - Cities must establish an appealing global identity and relevance in international markets not only to sell the city, but also to shape and build the region around a common purpose.

Going global is challenging. Macroeconomic forces in the global economy are beyond the control of any given metropolitan area. Moreover, national frameworks can determine if cities become aware of international competitive dynamics and are encouraged to embrace international exchange. National governments can either help or hinder global fluency through the way they manage regulations, fiscal and currency interactions, trade agreements, and immigration policies. In many cases their support for cities’ participation in global dynamics may reflect experience with the uneven outcomes of globalization, whereby just a handful of their cities have reaped the benefits, while many others have struggled to make adjustments.

But as governments everywhere come to recognize that metropolitan areas are the productive engines of the national economy, there is an impetus to begin new paths to global fluency. Cities already aggregate the productive assets that matter for global competitiveness: clusters of firms with dynamic interactions, skilled workers, advanced technologies, logistics and infrastructure, capital investment, and relationship networks.

Over the past millennium, cities have pursued very different and distinctive routes into globalization. These can be observed in clear cycles. At least four distinct pathways have been identified in the course of this study. These different paths are still visible today, in the new cycle, as urbanization and global interdependence move up another gear. The past and present are reminders that all cities enter globalization with their own unique set of assets, and must pursue global opportunities from that basis, rather than copying other cities. The framework for self-evaluation presented in this paper can help leaders in metropolitan areas of all sizes to grasp the decisive factors that drive global market performance, and to understand how global trade and engagement can grow local jobs, wealth, and prosperity.

The past and present are reminders that all cities enter globalization with their own unique set of assets.



I. INTRODUCTION

In June 2013 Brookings released a groundbreaking report, entitled *The 10 Traits of Globally Fluent Metro Areas*. Based on over 12 months of research, analysis, and consultation with leaders and thinkers in over 40 cities, the report presented for the first time a complete framework for how cities and metropolitan areas can engage and succeed in the future global economy. The 10 traits specifically focused on the imperatives and opportunities for metropolitan areas in the United States.

The message for U.S. leaders, however, is a highly distinctive one. After all, U.S. metropolitan areas evolved during the 20th century in a national economy of unmatched growth, size, and potency. Many U.S. metropolitan areas are landlocked and far from international borders. Most were able to reach unprecedented levels of wealth and productivity in the 20th century by serving almost exclusively a domestic market.

By contrast, the challenge that faces most cities outside America is how to change the terms or balance of a relationship that is already to a large extent global.

Many Northern and Western European cities have had internationalized economies since the advent of merchant capitalism almost 900 years ago. Others throughout the continent first gained industrial trading functions as a result of electrical and technical breakthroughs in the 19th century. Meanwhile major cities in Latin America and South and East Asia have been participants in historic trade routes and in colonial and imperial circuits of exchange for several centuries. In many cases they have only recently emerged from periods of political conflict, authoritarianism, or cultural insularity. Still others have been propelled into global networks because of their roles as transnational centers of culture, religion, sport, and tourism.

In each case, **the challenge for these cities is that the way they first became global may no longer be the best path to pursue** in the new global context where the lion's share of world output is now produced by emerging economies.²

The challenge that faces most cities outside America is how to change relationships that are already to a large extent global.

This paper applies the findings of the 10 traits to this broader set of non-U.S. cities and metropolitan areas. It explains and illustrates how and why these traits are relevant to the competitiveness and prosperity of cities and regions worldwide, beyond America. World cities all experience and interpret the changing global dynamics from their own perspective. Each possesses its own set of market credentials, frameworks, risks and possibilities. This paper is designed to help cities across the world understand better the ingredients for their competitive success, by learn-

ing from others and from the past. We identify three broad types of cities where the lessons of the 10 traits are especially urgent and valuable:

- Established cities in developed nations which must confront new economic realities—aging societies, insufficiently diversified economies, declining profitability, high infrastructure burdens, rising immigration, competition from other maturing regional markets, and new patterns of trade and investment. Examples: Barcelona, Brisbane, Oslo.
- Larger cities in emerging economies that must now play the primary mediating roles for their nations and regions, acting as hubs and junction boxes for new global interactions, Examples: Istanbul, Nairobi, Sao Paulo.
- Cities recovering from long-term political turmoil or “regime change,” and which have become more open to globalization after a generation or more when their national politics and international engagement were constrained by totalitarianism, conflict, instability, or corruption. Examples: Bogota, Cape Town, Colombo.

WHAT IS A METROPOLITAN AREA?

This report uses the terms *city*, *metropolitan area*, and *region* interchangeably to describe a collection of jurisdictions that together form a unified local labor market and are often defined statistically by the commuting patterns of its residents between home and work. Whereas some U.S. metropolitan areas have boundaries that extend over state borders, many metropolitan areas in Europe also stretch across national boundaries.

Not all metropolitan areas have developed in the same way or operate in the same governance context. This sometimes leads to confusion about their size, identity, and the distribution of political authority.

The world's megacities, for example, have very different political and governance realities. At least three patterns are visible. A first group has become systematically metropolitan as a result of national or federal governments deciding to create strong metropolitan-regional governments in advance, often at the start of a new phase of global engagement. Examples of this are the Tokyo Metropolitan Government, the Seoul Metropolitan Government, the Istanbul Metropolitan Municipality, and the Chongqing Municipality, which were established in 1947, 1949, 1984, and 1997 respectively, and which still seek to plan and manage a functional metropolitan region.

For others such as Sao Paulo and Mumbai, there is no independent metropolitan government and urban growth has long since exceeded the scope of the original city municipal boundary. Here, the state or provincial government has usually tried to take the lead in metropolitan-level planning, infrastructure and land-use, in some cases creating specialist metropolitan bodies to run limited services or plans. In addition to India and Brazil, similar approaches are in train in such diverse countries as Australia, Spain, and Colombia.

A third pattern has seen large citywide governments benefit from reforms to extend revenue and/or planning powers, but without proper alignment with the authorities that govern the rest of the metropolitan region. This is visible, albeit in rather different forms, in London, Moscow, Toronto, and New York.

Medium-sized cities have also faced the challenge of urbanization spilling over old city boundaries in the past two decades. Many have made important changes to allow city governments to consolidate powers with other municipalities, and to raise city powers and revenue over issues that affect the wider region.

There are numerous illustrations of this process; the 1995 consolidation of South Africa's eight major cities into metropolitan municipalities; the empowerment of Toronto as part of the 2006 City Act, and the amalgamation of Auckland's councils in 2010.

In many other cases neighboring municipalities within the same growing metropolitan area have learned to cooperate in locally designed and "bottom up" mechanisms that have sought to take on metropolitan challenges through inter-municipal cooperation.

Solutions vary, but adjustments that seek to align a region's ever-changing functional geography with investment, policy, and governance powers are often a sign that a metropolitan area is taking globalization more seriously and strategically.



II. WHAT IS GLOBAL FLUENCY?

Global fluency can be defined as “the level of global understanding, competence, practice, and reach a metropolitan area exhibits in an increasingly interconnected world economy.” If a city or metropolitan area acquires global fluency, it is better placed to optimize the benefits of globalization and manage its challenges.

This concept has the premise that globally fluent metropolitan areas become more able to achieve economic progress beyond their own borders, because of a combination of factors that can be described as either inherited, or intentional.

- **Inherited factors** are assets, characteristics, and relationships a city initially gains by happenstance, as a product and participant of history, geography, culture, and politics.
- **Intentional factors** are those areas where the city’s direction has been driven by deliberate leadership, coordination, stewardship, and engagement.

The research shows that global fluency is not a finite state, or end-point, that a city achieves. Instead it is an evolving process that requires not only a favorable course of events, but also local market actors to

constantly monitor and adapt to the changing global economic and political forces.

STAGES OF GLOBAL FLUENCY

The path to globalization is much like learning a language in that one becomes more fluent the longer one speaks it. Further, if one is raised in a family that speaks a foreign language, then fluency and interaction with foreign cultures is likely to come more easily. Metropolitan areas today, in similar ways, exhibit unique starting points and distinct levels of global competence based on history, intent, and interaction in the global market. They fall into one of three broad stages of global fluency:

- 1. Globally Aware:** As with learning a language, these cities can often read the global market with some level of proficiency, but they are unable to speak or listen fluently. The city’s main sectors

are touched by the global economy, but there is little momentum for a unified effort to embrace the global market and enact local change. Most local actors view their community within a domestic or regional context and are only marginally aware of how the dynamics of the global market affect them. Only certain players, because they are engaged with it daily, recognize that the region is part of the global economy. A majority of larger cities in Eastern Europe, Latin America, East Africa, and East Asia are currently at this stage.

2. Globally Oriented: These cities have developed conversational proficiency and are more engaged in the global economy, but they are not yet fluent. A broad set of local business, government, university, and nonprofit organizations is connected to global markets. They increasingly tend to evaluate and express their potential success, and the success of the city, using a global vocabulary and through the lens of the global economy. Metropolitan leaders take steps to understand their distinctive starting point in the global economy on key metrics such as exports, foreign direct investment, freight flows, and high-skilled immigrants. They use this information to determine assets, deficiencies, and international partners. Globally oriented cities embrace changing local demographics, ethnic diversity, innovation, tourism, and global trade and investment patterns. They are more intentional about the global economy, but have yet to acquire the proficiency that enables new opportunities to be

seized and the costs of globalization to be overcome. A majority of Western European cities are at this stage, as are some of the largest emerging megacities and a minority in the Gulf region, Australasia, and South Africa.

3. Globally Fluent: At this stage, metropolitan areas exhibit a true fluency of communication in and with the global economy. They are experienced enough to know that the competition is intense and persistent, the global market is constantly evolving, and that global relations involve routine practice, repetition, and adjustment. The city and its key actors view all subjects and relationships in a global context. For instance, for a city like London, recruiting talent from or selling products to Mumbai is just as viable as Manchester. In a globally fluent city, an established local culture of interaction and creative collaboration exists between firms, sectors, civil society, and government. Leaders continuously seek to increase global reach, visibility, and penetration by learning and applying innovative practices and networking with leaders from other international cities and metropolitan areas. Only a small number of cities are presently at this stage, led by London and New York but also including Hamburg, Sydney and Singapore.

Metropolitan areas exhibit different levels of global fluency at a given time. Those that strive to understand their unique starting points are better poised to engage appropriately going forward.

Global fluency is not only an imperative for traditional 'global cities,' but is now essential for all places.



NEW DYNAMICS IN THE TWENTY-FIRST CENTURY

Entry points to the global economy have changed from historic trade routes and old port cities to new markets in finance, information, and technology. Disruptive changes in technology and transportation ensure that no inherited advantage is everlasting, but they also present new pathways into globalization for an increasing number of metropolitan areas. Hamburg and London became active participants in international trade through ancient and medieval trade routes, such that cross-border trade and investment became a part of the DNA of these cities, which continues unabated. Meanwhile, increased travel, technology, communications, and improved infrastructure have minimized the barriers to entry, opening up doors for many more metropolitan areas, such as Colombo, Minneapolis-St. Paul, and Shenzhen, to enter the global market.

Three key dynamics today are raising the importance of global fluency:

- **Greater global integration** presents both opportunities and threats. Improved technology, infrastructure, and connectivity has allowed multinational firms and small and medium-sized enterprises (SMEs) to take advantage of opportunities through international trade, which has tripled as a share of global output since 1950.³ Trade's growing importance in all economies has meant that cities' production and consumption patterns are increasingly part of highly complex and dynamic global supply chains.⁴

- **Rapid expansion of a global consumer class**, led by income growth in emerging markets, has shifted the geography of export and services opportunities well beyond the United States and Europe. In 2013 emerging and developing country economies exceeded advanced countries in terms of GDP for the first time on record.⁵ By 2025, annual consumption in emerging markets is projected to reach \$30 trillion, presenting unprecedented export opportunities for goods and services.⁶

- **Rapid urbanization** is a byproduct of global integration, economies of scale, and the rise in demand for productivity, efficiency and proximity among manufacturing and service industries. As a result, the majority of global economic activity, innovation, interaction, and growth is concentrating in the world's rising cities and metropolitan areas. In 2012, the top 300 metropolitan areas accounted for 19 percent of the world's population, but nearly one-half (48 percent) of global GDP.⁷

Owing in part to these three trends, global fluency is not only an imperative for traditional "global cities," but is now essential for all places. The twin forces of globalization and urbanization have redefined what constitutes a global city. Peter Marcuse and Ronald van Kempen use the term "globalizing cities" to underscore that nearly "all cities are touched by the process of globalization." Lower barriers to entry mean that many more small and mid-size cities, in particular, will be able to successfully compete and establish a global identity.⁸



III. THE PROMISE AND CHALLENGE OF GLOBALIZATION AND METROPOLITAN GLOBAL FLUENCY

Taking part in global markets is no longer a choice for city and metropolitan leaders. They can either seize the opportunities afforded by the aforementioned global dynamics, or risk falling victim to the downsides of globalization. As this section outlines, global fluency as a concept helps metropolitan areas optimize the benefits of global engagement while minimizing the associated costs.



SEIZING THE BENEFITS OF GLOBAL ENGAGEMENT

The more globally fluent metropolitan areas and firms become, the better they will be able to influence and control their own destinies, sustain their economic positions, and maintain or increase competitiveness. These outcomes are possible because engaged players are more aware of, and prepared for, the forces at work on a global scale that could affect their performance in a rapidly evolving economy. They grasp and act on the need to continuously innovate and monitor their target markets (by segment and geography) to better manage and withstand up and down economic cycles.

A rise in the global fluency of a given metropolitan area should result, over time, in an associated rise in its ability to:

- export more products and services to international markets;
- attract more foreign investment from international firms, investors, and institutions;
- leverage more international visitors and students;
- boost human capital by attracting migrants of all skill levels; and
- play an active role in international networks that foster shared innovation, research, and ideas.

To do this, a region must build a recognized brand outside its own country and continent, remain competitive, and generate a new and diverse array of job opportunities. These metropolitan areas are typically more multilingual, cosmopolitan, and connected to global, rather than just national or regional, economies. They celebrate multi-faith and multi-ethnic festivals, and they attract exclusive international cultural exhibits, arts, shows, and tours.

Globally intuitive metropolitan areas do not lose sight of the task of remaining internationally competitive and growing their base of jobs and investment opportunities. This vigilance is achieved through

coordinated regional efforts. They also understand and embrace the role of imports, which provide lower-cost supplies for local firms, make more goods affordable and available to local residents, and often serve as an early signal of the potential to attract investment from the source of the import.

MANAGING THE DOWNSIDES OF GLOBAL ENGAGEMENT

In addition to growing exports and attracting investment, global fluency allows cities and metropolitan areas to understand and prepare for the potential downsides of globalization. Although all cities are affected by globalization, not all have been able to manage it well. The global roles of cities are constantly changing as advances in transportation shift the geography of production, technological advances modify the importance of sectors and industries, and new workers with new skills come online. Indeed, global fluency is not a static state; it can be lost as well as gained. There are myriad metropolitan challenges which accompany globalization, of which we illustrate just seven:

- The emergence of a “two speed” metropolitan economy, whereby globally oriented activity creates returns that sharply separate those who participate from those who do not.⁹
- The need to shape the impact of multinational firms on the growth and innovation of local enterprises.¹⁰
- Inflationary effects of foreign earned income on housing, jobs, and consumer markets.
- Integration of an ever-rising foreign-born population, especially during economic downturns.
- Difficulty adjusting to a new post-industrial economy and the new skills, urban design, and livability demands which accompany it.¹¹
- Diversifying beyond an initially lucrative tourism profile, and developing an identifiable investment offer and more diverse economy.

- Retaining the political consensus to continue investing in the region when growth can lead to expansion beyond original boundaries, and can change perceptions of citizens and politicians.

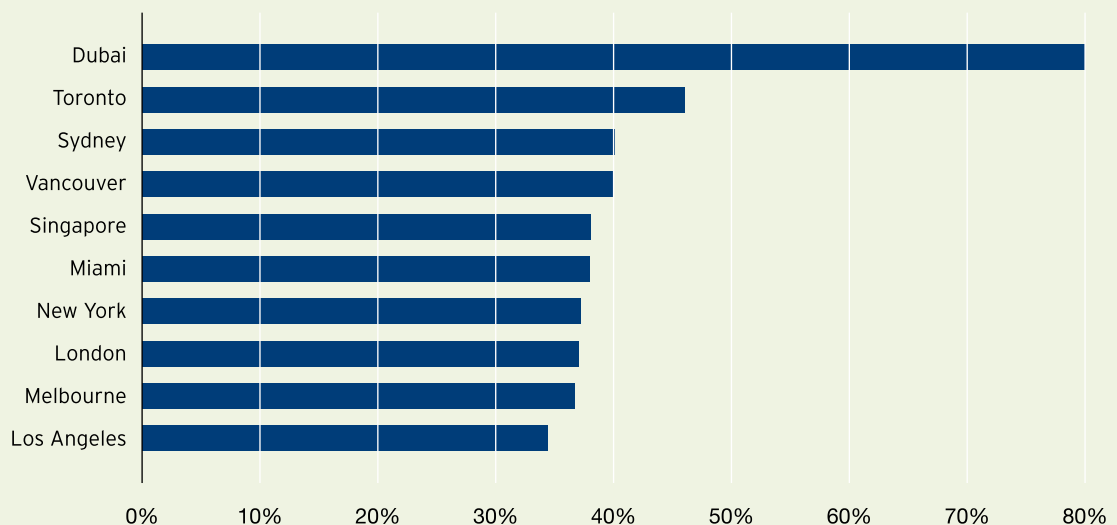
For precisely these sorts of reasons, cities that have successfully pursued global fluency have, so far, best managed the process of internationalization. Among other things, to be globally fluent is to pay attention to skills and education systems, housing and transportation, development and spatial planning, and supply chains and local services. Doing so better ensures that increased globalization does not come with unintended consequences. Therefore, effective metropolitan governance is critical to successful globalization. Governance must address the challenges to housing and labor markets, public services, and land uses that new global links may bring. Governance must be strong enough to strike deals with international firms and investors that secure local benefits. It also means that the process of competing for more global opportunities must be the subject of constructive public debate.

HOW WELL PLACED ARE CITIES WORLDWIDE TO 'GO GLOBAL'?

There is a small group of cities that may be legitimately termed globally fluent. These cities do not just possess internationally-facing assets, but deliberately leverage them to achieve added value. For example, the pursuit of global fluency is often both a cause and effect of having a high proportion of foreign-born residents in the city (Figure 1).¹² But a diverse population is by no means a guarantee of achieving global fluency. Globally fluent cities are not only diverse; their populations are highly mobile, familiar with international trends, have their own overseas connections, and work for firms that routinely sell products abroad.

There are many major metropolitan areas that have become more ethnically and culturally diverse largely by default, because the size, wealth and regional dominance of their market attracts mobile workers in large numbers. Each of Los Angeles, Riyadh, and Moscow is home to more than one million residents born abroad, but none took a deliberate or coordinated approach to attract diverse populations or

FIGURE 1. TEN MAJOR METROPOLITAN AREAS WITH MORE THAN ONE-THIRD FOREIGN-BORN POPULATION



Source: Brookings analysis of national data on regional population diversity; see in-text citation for full source

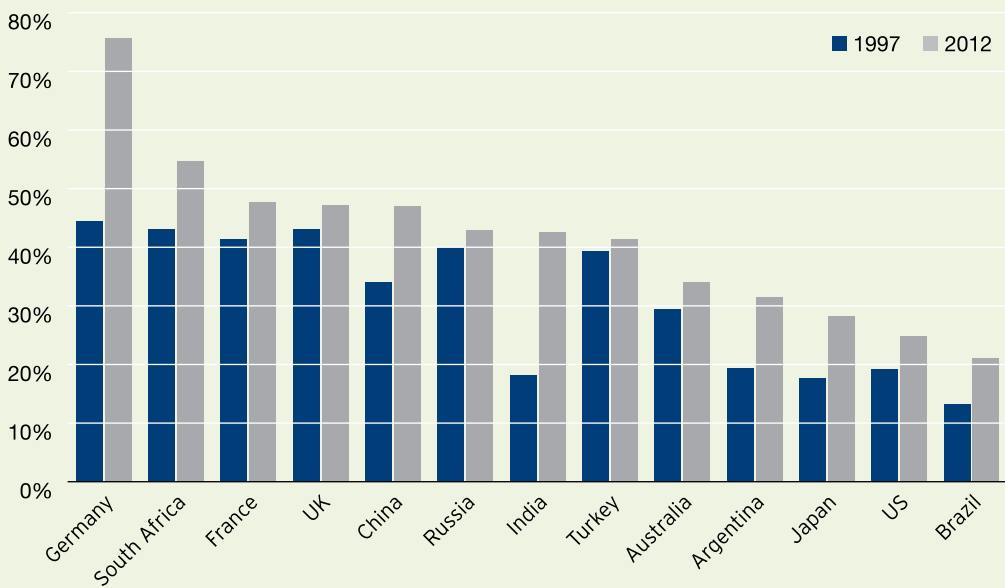
employ this potential advantage as a strategic asset for internationalization. Instead the task of leveraging the connections a diverse population may have with a variety of global growth markets is left to isolated tourist bodies, international outreach departments, trade and investment promotion campaigns, or national government agencies. A diverse population is not by itself sufficient to prevent local economic development efforts remaining focused on domestic demand, or on ad-hoc inflows of foreign direct investment. Globally oriented and globally fluent cities, by contrast, incorporate their social diversity into *strategic proposition*.

One broad way we might begin to think about globalization of cities is by examining trade to GDP ratios. At the national level, the variation in the role of foreign trade in the economy is enormous; from 16 percent in Syria, to 398 percent in Hong Kong. Analysis of fourteen major countries shows that the average merchandise trade to GDP ratio is currently 40 percent (see Figure 2).¹³ Germany (and therefore its cities, given it is three quarters urbanized) leads the way among major industrialized nations, at over 70

percent, while Brazil, the United States and Japan are the laggards, at under 30 percent.

It is significant that many of the larger nations feature toward the bottom end of this chart. Powerful domestic or continental markets have, until recently, functioned as a buffer against becoming more globalized, for logical economic, cultural, and sector mix reasons.¹⁴ Their cities may have drawn in firms and people from far and wide due to their dynamic and wealthy economies, and some may have even developed informal relations with certain parts of the world because of these corporate and immigration inflows.¹⁵ But their embeddedness within large, stable local markets has created an introspective, even parochial path dependency (see sidebar). Usually it has been political or economic upheaval that has altered this dependency. Liberalization toward the end of the Cold War has seen India and China's trade ratios soar over the past quarter century. More recently, prolonged economic sluggishness is prompting a re-assessment of path dependencies in the United States, Japan and even Italy.

FIGURE 2. MERCHANDISE TRADE (IMPORTS AND EXPORTS) RATIOS AMONG 14 LEADING NATIONS, 1997 AND 2012



Source: World Bank, "Data: Merchandise Trade (% of GDP)", (2013)

PATH DEPENDENCE

Can established cities with limited market relationships successfully pivot to current and future markets?

Some cities—including Bangkok, Cairo, and Los Angeles—are global in terms of their assets and popularity, but not in terms of proactively engaging with the world. Their activities represent a certain *path dependence*—decisions that are limited by what one has done in the past even when those circumstances become less relevant—that keeps these metropolitan areas on a more insular road to economic growth.

Through much of the 20th century, many of the most advanced industrialized countries grew by focusing on familiar markets in which they possessed a decisive competitive advantage. In a lot of cases, their city economies relied on long-established links with markets forged through linguistic or imperial affiliation. They entrenched themselves in a fairly narrow and inflexible model for development. As the economic and political rationales for such systems wither away, cities need to develop collaborative strategies to overcome the inertia of existing patterns of behavior.

THE NEW ROLE OF NATIONAL GOVERNMENTS

Trade relationships and framework agreements are just one dimension of the critical role national governments play in determining how a city seeks a path to globalization. But even within the same national contexts some metropolitan areas globalize more deeply and quickly than others. Barcelona, Poznan, Bangalore and Shenzhen are just four cities that have sought to compete on the global market more assertively than other compatriot cities with common features and endowments. They show that local and metropolitan factors and actors can shape different paths and degrees of global success within the same nation.

Although we typically understand cities to be dependent on decisions made at the national level, this dependence is beginning to appear mutual. For many governments in both the developed and emerging world, national economic success rests substantially on their metropolitan areas becoming more effective locations of global trade and attractiveness. With over a third of global GDP growth up to 2025 being generated by just 100 cities, urban areas are now the major engines of most national economies.

One consequence is that many national and federal governments in emerging economies have become

more active in supporting their leading cities and metropolitan areas to globalize effectively with investment, regulatory reform, and promotional programs. Many now appear prepared to implement drives for transparency, structural reform, and strategic vision for cities and sector competitiveness. Some are even incentivizing growth in urban cores to concentrate activity and specialization, so that ultimately their cities can compete in higher value services sectors once early cycles of manufacturing growth begin to decelerate. Indeed it is noteworthy that for faster growing middle-income countries, city and metropolitan promotion is recognized and embraced as a branch of economic policy much more fully than in many advanced and mature economies.¹⁶

One prominent example of national governments taking the lead in supporting urban globalization is Sri Lanka. After its protracted civil war, the national government is now committed to becoming an upper middle-income gateway country by 2016. It has created a national urban vision at the heart of its development policy framework, the Mahinda Chintana.

Consistent productivity growth in the Colombo metropolitan region (CMR), in the west of the country, is the plan's centerpiece. The state will support the CMR's competitive aspirations against other Asian cities in IT, financial, and business services, by gradually

boosting the functions and resource capacities of Urban Local Authorities (ULA). Clear mechanisms have been identified to aid economic specialization and complementarities among Sri Lanka's five leading metropolitan areas. A centrally sponsored scheme for infrastructure finance is now mobilizing private capital for projects with high economic returns.¹⁷ The government's program gained the support of the World Bank, which has provided a loan of \$213 million for the Metro Colombo Urban Development Project.

Given that so many of the policy levers are determined at the national level, national contexts and frameworks clearly make a difference to how far and how quickly a city can embrace globalization. And yet it is also apparent that without concerted and longer-term metropolitan action, moments of global engagement may be one-off or short-lived.

Effective global engagement by metropolitan areas provides national and federal governments with at least three important challenges that must be addressed:

- First, as the city becomes well known for its cosmopolitan appeal and diverse international links, how should the balance be struck between promoting the city and promoting the nation? Which is the global brand? This is an acute challenge in smaller nations with dominant cities. Should the Norwegian government promote Oslo or Norway as their main global place brand? Is it Israel or Tel Aviv, Queensland or Brisbane, Western Cape or Cape Town that will attract talent and investment? These choices imply a major mindset change for national governments.
- Second, effective global engagement can also bring substantial internal challenges in terms of inflation, congestion, and competition for jobs, homes, and services, and greater income polarization. Most of these challenges require investment in adjustment and capacity combined with carefully targeted national policies to assist people who are displaced or disadvantaged by exposure to global markets. Few national governments have yet learned how to ameliorate these unintended con-

sequences of global success. Leading cities such as Seoul, Singapore, and Hong Kong now face these challenges but can learn very little from London, New York, or Tokyo.

- Third, because some metropolitan areas globalize more quickly and deeply within the same country, national governments must ask what can be done for those that have not succeeded. Should they compete with their successful (more global) siblings, or should they find a path of complementarity and better connectivity, or should they accept that the more global cities will eventually suck in all their best talent and firms? These are tough challenges for national governments to address in the context of deep and growing interregional disparities. Should the U.K. government try to help Northern English cities be better connected to London or to be more distinct and distant? Should Seoul's vast wealth of industry be redistributed to other centers in South Korea or should Seoul become more dominant but better connected?

As the relationship between cities and nation-states evolve, the role of national governments in optimizing the impact of metropolitan globalization across both time and space is only just becoming understood. Nations will continue to be much more than a backdrop, as cities seek to pursue and retain the ten traits of global fluency, which we detail in the following section. For more on the role of national and other governments, see Trait 9.

National contexts and frameworks clearly make a difference to how far and how quickly a city can embrace globalization.

REPORT METHODOLOGY

This project was led by a Brookings Institution team based in Washington and London. The methodology for developing and evaluating the 10 traits is outlined below. During critical stages of the research, the team consulted an international advisory board of seven experts from academia and the private sector. For a list of these individuals, see the Acknowledgments section.

- **Developing the Traits:** The research team developed a preliminary list of 10 traits of global fluency through a three-step process: 1) a review of relevant research on cities in the global economy, 2) an examination of global cities' rankings and indices to understand potential traits, and 3) guidance and advice from the advisory board.
- **Evaluating the Traits:** After developing a hypothesized list of traits, the research team tested their validity by preparing case studies on 42 metropolitan areas (15 U.S. and 27 international). The team chose a diverse set of metropolitan regions by size and geography. The team gave preference to regions with an existing research base. Each case study documents a metropolitan area's recent global performance (measured by global indices and other data) and unpacks the underlying determinants of that performance. The advisory board recommended this qualitative approach given the limited data available to consistently measure global fluency across an international sample of metropolitan areas. The selection of case studies is not presumed to be a ranking or top division of globally fluent metropolitan areas, nor a representative sample of all cities. For each case study, the team interviewed at least one or two local experts to confirm findings, provide additional input, and react to the initial, hypothesized set of 10 traits.

The research team analyzed 42 regions for their global traits and performance. They are: Bangalore, Barcelona, Bilbao, Boston, Brisbane, Busan, Cape Town, Chicago, Colombo, Denver, Greenville, Hamburg, Helsinki, Istanbul, London, Los Angeles, Mexico City, Miami, Milan, Minneapolis-St. Paul, Moscow, Munich, Nairobi, Nanjing, New York, Omaha, Oslo, San Antonio, San Francisco, San Jose, São Paulo, Seattle, Shenzhen, Singapore, Sydney, Tel Aviv, Tokyo, Toronto, Vienna, Washington, DC, Wichita, and Zurich. The case studies and case study reviewers are available here: [Brookings.edu/globalmetrotraits](https://www.brookings.edu/globalmetrotraits).



IV. THE TEN TRAITS

The case studies, literature review, and interviews with local experts and leaders in dozens of world cities conducted for this project have allowed for a set of ten traits to be identified that define globally fluent metropolitan areas. These traits have proved to be strong determinants of a metropolitan area's ability to succeed in global markets, manage the turbulent effects of globalization, and better secure a desired economic future. Metropolitan area actors can use the traits to assess how well their local markets and systems measure up and determine which combination of traits represents the most realistic and compelling local opportunity and pathway.

TRAIT 1Leadership with a
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The 10 traits are:

- 1 **Leadership with a Worldview**
Local leadership networks with a global outlook arguably have the greatest potential for impact on the global fluency of a metropolitan area.
- 2 **Legacy of Global Orientation**
Owing to their location, size, and history, certain cities are oriented toward global interaction at an early stage, giving them a “first mover” advantage.
- 3 **Specializations with Global Reach**
Cities often establish their initial global position through a distinct economic specialization, leveraging it as a platform for diversification.
- 4 **Adaptability to Global Dynamics**
Cities that sustain their market positions are able to adjust to each new cycle of global change.
- 5 **Culture of Knowledge and Innovation**
In an increasingly knowledge-driven world, positive development in the global economy requires high levels of human capital to generate new ideas, methods, products, and technologies.
- 6 **Opportunity and Appeal to the World**
Metropolitan areas that are appealing, open, and opportunity-rich serve as magnets to people and firms from around the world.
- 7 **International Connectivity**
Global relevance requires global reach that efficiently connects people and goods to international markets through well-designed, modern infrastructure.

- 8 **Ability to Secure Investment for Strategic Priorities**

Attracting investment from a wide variety of domestic and international sources is decisive in enabling metropolitan areas to effectively pursue new growth strategies.

- 9 **Government as Global Enabler**

Federal, state, and local governments have unique and complementary roles to play in enabling firms and metropolitan areas to “go global.”

- 10 **Compelling Global Identity**

Cities must establish an appealing global identity and relevance in international markets not only to sell the city, but also to shape and build the region around a common purpose.

There is a rationale to the order of these traits. The list begins with *Leadership with a Worldview* because having a worldview is the basis for regional leaders to be intentional in evaluating and leveraging all other traits. The list ends with *Compelling Global Identity* because this trait encompasses how the region packages and presents the combined group of traits on a global scale. Traits 2-9 constitute a logical flow of how cities typically enter and establish their global positions, starting with the “first mover” advantage





of those that were globally oriented early in their histories. The listing also reveals how the traits pair off with each other, such as Traits 3 (specializations) and 4 (adaptability); Traits 5 (innovation) and 6 (opportunity and appeal); and Traits 7 (connectivity) and 8 (securing investment).

This paper does not provide a ranking, index, or grouping of metropolitan areas by stage or category. Global cities rankings serve a purpose and are readily available from a wide variety of sources, using very different methods and data. Instead, this guide is designed to make the reader think about how to get on a path toward a desired future, provide insight into the underlying attributes to global success, and allow each metropolitan area to determine its unique starting point and potential. Ultimately, there are different pathways to global fluency, and each metropolitan area must explore them on its own terms, using the examples of other metropolitan areas as a guide.

Some of the 10 traits are relevant not only to global fluency, but to fundamental economic development competitiveness and success. That point is not at odds with the intent of this paper. Metropolitan areas that exhibit these traits on a local scale are more likely to realize success on a global scale. What is important is that actors view each of these fundamentals through a global lens in order to be more fully prepared to compete on a worldwide scale. A few key observations should be kept in mind when considering the 10 traits:

- The most successful cities are those that achieve some level of **integration across several of the traits** (that is, they are not overly dependent on one or two traits) and excel in one or more core traits. Few, if any, cities excel in all 10 traits.
- The **relative strength of each trait evolves over time** based on competition in the global market and the foresight of local actors. Cities can lose their edge if they are complacent.

- Metropolitan areas can **inherit strengths** related to certain traits during one era and be more **intentional** during the next. Today's successful intentional efforts become part of the metropolitan area's inherited traits.
- Global fluency is about **long-term thinking**. It bears repeating that global fluency is the sum of accumulated characteristics and benefits over multiple business cycles.
- To compete internationally, metropolitan leaders must embrace the **interplay of global with local**. Going global is not just about selling in international markets. It is also about ensuring that the local markets can successfully operate on a global scale. Cities must pursue economic expansion through greater global trade and engagement; leverage established industry cluster strengths; and strive for a seamless exchange of goods, services, people, ideas and capital. But they must also build local strengths. At the local, and perhaps the more important, level is a metro's ability to improve its commitment and capacity to leverage its strengths and through sound governance to nimbly adapt to the ever-changing dynamics of the global economy.

These cross-cutting themes reveal that global engagement strategies will differ on the basis of economic, political, and geographic factors that distinguish regions from one another. However, all metropolitan areas share an initial step on the path to global fluency: evaluating the strengths and weaknesses that together define their global position. The set of traits proposed here represent one resource to begin that process.

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Identity**BROOKINGS
METROPOLITAN
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1****LEADERSHIP WITH
A WORLDVIEW**

A metropolitan area is not one actor. It is made up of a diverse array of players representing business, government, nonprofit, and academic sectors that sometimes interact and sometimes do not. Most leaders in these sectors are content to operate within the status quo, managing everyday issues to realize incremental improvement and achieve annual targets. In many emerging cities, the local business elite are neither significant wealth creators nor drivers of sophisticated manufacturing production. Often they rely on political connections to retain monopoly privileges.

However, during each generation, certain leaders or networks of leaders in select cities have surfaced to boost regional productive capacity and drive a new vision for the future. Their new innovation or push for change is so compelling that it ultimately changes the way others in the region view the world and their position in it. It is when these local networks of leaders come together around a common metropolitan vision that lasting change takes hold.

Local leadership networks with a worldview, a longer-term vision, and a focus on regional coordination have the greatest potential for building their city's global fluency. These networks leverage strong local traits to best position a metropolitan region for sustained success. Leaders within such networks:

- are prepared for the strenuous task of attracting foreign investment in key sectors.
 - foster internal collaboration and public-private alliances so that all are intentionally related to the shared economic future of the regional market.
 - open up new doors for local firms overseas and build global networks for the long term; and
 - view global markets as relational, not only one-way.
- Strong leaders can rise from any sector. However, change is most likely when a network of leaders, led or coordinated by purposeful local governments, a chamber of commerce, regional economic development partnership, or business association, embraces a shared vision.
- These traits are not set in stone. While one generation of regional leadership may aggressively pursue international markets, the next may be content to manage inherited traits. At some point, a strong mayor may break with the path and set a new course, reinvigorating the effort. However, a resilient local leadership network committed to global fluency that can endure beyond the tenure of individuals will best ensure a sustained international effort. The hallmark of external orientation and greater global fluency is when organizations outside government continue to extend global reach long-term. Regional economic development bodies, for example, such as those in Munich and Bavaria, have been the energy propelling expansion the aviation platform, attraction of foreign companies, and strengthened local export sectors. All cities possess leaders whose commercial or cultural commitments grant them access to the bigger picture. These leaders can be convened in order to cement a lasting leadership network around a broader global vision for the region.
- understand their own region's legacy of global orientation.
 - have a vision for how to succeed in the global economy over the long term.
 - have a plan to extend the metropolitan area's existing economic networks to embrace new opportunities.
 - are able to mobilize different levels of government around a common proposition and better ensure key decisions about regional priorities, strategies, and investments are evaluated through a global lens.

SEATTLE



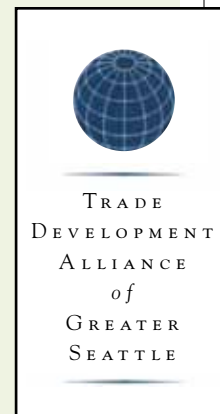
In the late 1980s, a core group of local leaders in Seattle realized that only a few U.S. cities were destined to be truly global players. The city was still reeling from a deep recession, and the leaders were determined to become one of those global players by ensuring the city leveraged its aerospace industry, an emerging technology sector, its Pacific Coast location, and the legacy of trade and exchange. However, until 1990, greater Seattle was a highly fragmented metropolitan region. When the new Port director, Zeger Van Asch van Wijck, expressed concern to the Seattle Chamber of Commerce president, George Duff, about being left in the dark about a visit from an official from Singapore, they both were spurred to found the Trade Development Alliance of Greater Seattle (TDA) in 1991.

At the time, there was no U.S. precedent for what the TDA was trying to create. Its new chief executive, Bill Stafford, was assigned to develop and institutionalize the TDA as the regional Chamber's global business arm. Its goal was to better coordinate Seattle's international activities and to promote the region in international markets. Stafford, a former deputy mayor, was hired not because of his immense international experience, but because of his local relationships, political savvy, and skill in pulling regional leaders together around a common purpose.

Stafford saw the need to develop more internationally sophisticated local leadership. The members of the first board represented a true cross-section of the community, and membership grew rapidly to reflect the broad diversity of the region. Stafford's early focus was on developing a marketing kit to promote the virtues of the Seattle area. He also prioritized supporting companies, managing visitors and delegations to Seattle from overseas, and linking small business with foreign delegations. The TDA also sought to position Seattle as an emerging global player by proposing the region as the venue for early trade talks around the nascent North American Free Trade Act, a sales pitch that proved successful. The hallmark of the TDA is the annual outbound trade missions and intercity visits, cosponsored with the Seattle Chamber. These visits helped pioneer the concept of visiting U.S. cities to examine best practices and learn from peers. These trips open both the "minds and eyes" of Seattle's leaders to how their city relates to other parts of the world.²⁰

To view other examples supporting this trait, see the case studies for Barcelona, Denver, Hamburg, Singapore, and Zurich.

This sidebar draws heavily from an internal report of the Trade Development Alliance, "Trading Up" (2011) and email correspondence and conversations between Brad McDearman, Fellow at the Brookings Institution, and Sam Kaplan, President of the Trade Development Alliance.



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TRAIT 2 LEGACY OF GLOBAL ORIENTATION

Those cities whose location, size, and history naturally oriented them toward global engagement and interaction at an early stage often attain a “first mover” advantage that propels them to the front of the pack. Aspects of global culture and identity were long ago ingrained in the local psyche of these cities, and this continues to shape how they view and approach the world today. In these locales, natural geography (natural resources, a strategic position on an ancient trade route, location on a foreign border, or a coastal location), political geography (seat of government), the economy (a role as an early center for commerce or specialization), immigration (people drawn to opportunity or fleeing religious conflict), or simply a convergence of circumstances, came together to form a city’s unique legacy and global inclination.²¹

Cities that were able to embed these international flows of goods, people and capital productively and remain free of political turbulence over successive cycles of globalization have tended to achieve stronger positions and returns. This has fostered a more automatic orientation toward global markets and provided these cities with the advantage of shaping many of the most critical rules of the current global game.

However, past prominence does not guarantee continued success. Cities as diverse as Detroit, Manchester, and Rome were highly globalized at one point, but for a variety of reasons, they were unable to sustain their position. At the same time, cities are proving that it is never too late to take advantage of changing dynamics. Munich, Singapore, and Toronto responded aggressively to a convergence of unique circumstances after World War II, positioning themselves as the next tier of rising global cities. These cities continue to build on this legacy and have an advantage over those cities just now beginning to globalize.

The sheer size of a city’s economy (gross metropolitan product) can also serve as both an indicator of historic global orientation and a driver of increasing global interaction. Quintessential world cities such as London and New York continue to solidify their global positions as investment, immigrants, and new transit connections are increasingly drawn in.²²

Further, a long-held position as a nation’s largest and most important business or political center tends to propel cities to global recognition and fluency. This is the case with emerging world cities such as Buenos Aires, Mexico City, and Moscow, where national governments have not discouraged growth in their capital cities and not restricted labor mobility in the name of a more balanced urbanization. Although this growth has resulted in severe infrastructure overload, underemployment and environmental damage, these cities have also retained economies of scale in public and private sectors, and the productive assets needed to attract investment and trading partners.

Cities such as Nanjing, Nashville, and Pune are quite similar in size to many political and financial capitals, but exist in a domestic system where they are only second-tier cities. Therefore they must leverage new market, communication, and transportation dynamics, which offer greater ease of entry into the global economy for a larger and wider variety of metropolitan areas.



CASE EXAMPLE: TORONTO

Toronto was propelled into the international arena in the postwar era (1945) owing to a convergence of unintended but advantageous geographical and geopolitical factors. Proximity to booming markets along the U.S. East Coast guaranteed rapid growth in manufacturing output. Meanwhile Commonwealth trade links brought rewards during the political destabilizations of World War II, African and Asian decolonization, and later upheaval in the Middle East.²³ Canada's security advantages and the commercial legacy of British imperialism rendered Toronto an attractive place for business. For a brief time, more people per capita were immigrating to Canada than the United States. Entrepreneurial and investor immigrant communities were attracted to Toronto by the dense local market, mature trade links, and existing pockets of diversity. The comparatively smooth accommodation of immigrants led American commentators to describe Toronto as "the city that worked."²⁴

Politics also played a role in Toronto's emergence as Canada's unrivaled business center. Secessionist fears among the Anglophone business community in Quebec prompted the relocation of financial and corporate assets from Montreal to Toronto.²⁵ This move was opportune, given the subsequent focus on finance in the global economy, the rapid investment in natural resource industries, and the emergence of creative and cultural sectors whose anchor institutions had also assembled in the city.

To view other examples supporting this trait, see the case studies for Cape Town, Istanbul, London, Los Angeles, Nairobi, New York, Sao Paulo and Vienna.

TRAIT 3

SPECIALIZATIONS WITH GLOBAL REACH

Specialization, or focus on a unique expertise, is what drives new companies to early success in competitive markets. Entrepreneurial, young companies often make a splash in the market by introducing a new product or innovation. A larger firm is best able to maintain and improve its market position by continuing to build on its core specialization and by creating multiple specializations and mixes that enable the firm to diversify and move effectively through each cycle of change. To be "world beating," a firm must provide a high-quality good or service that creates demand in markets throughout the globe.

The same logic holds true for globally fluent cities. The most internationally recognized and experienced cities initially established their global positions by leveraging a distinct niche. Many smaller metropolitan areas have more recently entered global markets primarily through the lens of their specialization. This could include specialization by industry cluster,

headquarters or institutional operations, technology, business environment, natural resources, location, or even workforce.

London and New York today possess the full breadth of assets associated with the most global cities. However, both cities are distinguished by their roles as top global financial and cultural capitals. At the same time, the relatively small city of Zurich has established itself globally by providing an inimitable financial services climate. An initial global presence can be established through all kinds of specializations; electronics (Shenzhen), education and innovation (Boston), shipping (Busan), ICT (Helsinki), luxury goods (Milan), and non-governmental organizations (Nairobi).

These specializations serve as anchors during the early stages of global engagement but should not be viewed as endpoints. They are better viewed as a means to initially engage in global markets in order to create a more diversified (through new specializations

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and markets) and sustainable metropolitan area over the longer term. Metropolitan areas, like firms, must proceed with caution. Mario Polèse argues that “no location advantage is eternal, no matter how seemingly indestructible...the more highly specialized an urban economy is, the more vulnerable it is, no matter how hip or high-tech the city’s star industry.”²⁶ In an era of rapid change, new technologies and more

intense global competition can undermine a city’s economy in short order. A healthy balance of specialization, diversification, and adaptability (Trait 4) is critical to long-term global fluency. In turn, the more globally fluent a metropolitan area becomes, the more prepared it is to sustainably preserve and expand its specializations.

BANGALORE



Bangalore’s entry into global markets hinged on mobilizing existing knowledge advantages to achieve software industry specialization. Its path of global engagement did not depend on favorable city governance or on central government “picking winners.” Instead, local IT software engineers worked to gain experience in the future of PC programming just as cost pressures in more established markets began to bite.

Bangalore’s participation in specialized global software really accelerated after Texas Instruments’ arrival in 1985, which laid the platform for successive climbs up the value chain. Further engagement of multinational firms catalyzed Bangalore’s local software design scene.²⁷ The shift from outsourcing to offshore services was spurred by firms upgrading production processes and procuring higher skill functions. New quality certifications made contracts with the banking and retail sectors possible, which in turn raised project management, quality assurance, and productivity standards.

Specializations can achieve global reach when they eventually attract national and supra-national support. From the late 1980s in Bangalore, the Indian government helped upgrade the data-communication infrastructure and tax regime to fuel growth and advance skills development. Later, the World Bank sponsored new development agencies to oversee and finance real estate and transport development.²⁸

Bangalore’s experience shows how specialization can yield more intentional global awareness and economic diversification in the second generation. By 2000, local firms and entrepreneurs had begun to congeal into a technical community with a common agenda for growth. Global interaction had filtered down to invigorate the skills base across public sector manufacturing industries and also aerospace and telecom laboratories.²⁹ Mutual coalitions reflected a shared awareness of the city’s new status as an industrial center where products can be developed, tested, and adapted quickly for fast-moving global trends. This is an important part of the second phase in a specialized city’s drive toward global fluency, one which also requires coordinated infrastructure investment and a commitment to inclusive growth.

Global specialization cannot usually be achieved in isolation. Bangalore’s expertise in core computing evolved as part of a division of intellectual-technical labor shared with three other cities; Chennai’s automobile competencies, Pune’s engineering strengths and Delhi’s legal services culture. Furthermore its capacity to expand into higher value activities depended on Indian returnees with experience in North American technology.³⁰ Cities seeking to become specialized hubs need to draw on all the regional capabilities and linguistic affiliation possible.

To view other examples supporting this trait, please see the case studies for: Boston, Helsinki, Minneapolis-Saint Paul, Munich, Nanjing.

TRAIT
4

**ADAPTABILITY TO
GLOBAL DYNAMICS**

Cities that sustain their levels of global fluency and economic success over time exhibit a critical ability to adjust to each new generation or cycle of change. These cities are nimble, responsive, competitive, and capable of reinventing themselves over short time periods. They manage (and often embrace) rather than resist inevitable change, believing their ability to adapt and evolve will keep them at the forefront of the global economy. In certain regions, adaptability is an innate part of the culture, better enabling succeeding generations to rise up to tackle new challenges and identify new opportunities.

The most agile cities develop and embrace multiple specialties, attract newcomers with diverse perspectives, and are home to a robust ecosystem of small, medium, and large firms, making them more diversified and not overly dependent on the success of any one institution or cluster. New York's role as a financial capital served as a core specialization (Trait 3) that positioned it as one of the world's top global cities.³¹ It has solidified its position by diversifying and specializing in information technology, media, accounting, management consulting, and other business services. Hamburg's maritime connections have been a platform for leaders to consistently re-align within global value chains, including today in wind power and green transport. These cities are more adaptable (and arguably less vulnerable) today because they are evolving to be less dependent than they once were on their core specialties.

**Cities that sustain
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Cities that are highly successful during one period of economic globalization, however, risk becoming complacent. They often fail to fully grasp global dynamics and innovations that threaten their market position because they have become comfortable with current models for success. Milan proved unable to maintain its global stature in high-end design and manufacturing because its institutions were too parochial to initiate a phase of SME internationalization.³² And back in

the 19th century, Constantinople failed to adapt to European scientific and engineering innovations, and lost its capacity to influence others politically and culturally.³³ On the other hand, the city-state of Singapore (see sidebar) relies almost solely on foreign trade and investment to maintain its economy and must constantly adapt to global dynamics. Singapore is agile and resilient by necessity.

Some cities are better placed to adapt than others. A free and open national market, cultural diversity, and a history of private sector entrepreneurialism, all embed flexibility and resilience into a city's

approach to globalization. This is especially important as emerging cities increasingly need international-class entrepreneurs in fields such as outsourcing and life sciences. The 21st century challenge for those that lack some of these inherent assets is to recognize the *need* to adapt and the value of resilience.

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Identity**SINGAPORE**

Singapore's undersized domestic market and strategic trading location sets the basic framework for the city-state's tactical and adaptive approach to globalization. Since gaining independence in 1965 in a context of regional uncertainty and obsolete infrastructure, it has attained pre-eminence as a manufacturing center, a global services node, a tourism destination, a regional headquarters location, and now a science and technology hub. It has done this with successive realignment during periods of global economic instability. Its global fluency hinged first on a disciplined phase of labor-intensive industrialization matched by competitive investment incentives.³⁴ More recently it has leveraged a more skilled and global labor force and guaranteed a comfortable and ever more cosmopolitan quality of life.

Singapore's agility stems from the capacity of the ruling People's Action Party (PAP) to gain popular consent for the internationalization of the population and a foreign business presence. The PAP has consistently communicated maxims of economic survival and strategic adaptation to more global values and practices. This has created the political space to oversee new immigration policies to stimulate labor market adjustments. The semi-autonomous Economic Development Board has enjoyed a wide remit to approve loans to newly preferred types of foreign firms, while the Ministry of Education has been able to initiate fast changes at all levels of education to meet changing skill demands.³⁵ The PAP's political success and legitimacy have allowed it to pursue globalization with a focus purely on policy merits rather than internal political battles.³⁶



Singapore's export model was tested once again by the global financial crisis. Leaders once more demonstrated nimbleness in guiding investment toward technological research, commodities trading, logistics and media.

To view other examples supporting this trait, see the case studies for Bilbao, Hamburg, San Jose, Tokyo

TRAIT
5

**CULTURE OF KNOWLEDGE
AND INNOVATION**

Growth in the global economy for firms, cities, and nations requires constant innovation—the ability to generate new ideas, methods, products, and technologies. Because people remain the most important ingredient in an economy dominated by knowledge, the most successful regions will typically be those with the highest levels of human capital.³⁷

Cities can increase their stock of human capital in three ways. First, they can educate their homegrown population. Investments in education, universities, colleges and technical schools remain the cornerstone for building human capital. Universal access to high-quality education and training can also ease the income polarization that challenges many global cities by ensuring a larger portion of the workforce has the skills needed to contribute to regional industries. The education ecosystem can also create a more culturally aware and globally prepared population. One aspect of Turin’s internationalization strategy, for example, has been to grow expand higher education around important inter-governmental institutions, including the European Training Foundation and its UN Staff College.³⁸

Second, metropolitan areas can attract new workers from external markets through immigration and international students. This strategy requires an open and attractive climate and economic opportunities for migrants (Trait 6). In the case of London, the influx of skilled immigrants to satisfy demand in the metropolitan labor market has partly alleviated concerns about the local school system’s ability to build a pipeline of skilled labor, and has also prompted much-needed reforms and investments in local education.³⁹ The continued ability of cities such as London to attract the best talent reveals the tendency for highly educated individuals to gravitate to highly educated regions. Unfortunately the opposite occurs in less educated regions, in what the economist Enrico Moretti has called the “Great Divergence,” a phenomenon identified in the United States but taking place worldwide.⁴⁰

Third, regions can sustain the economic benefits of human capital by retaining their talent. Although regions may educate homegrown and foreign-born

populations, they do not always retain them, as Cape Town, Moscow, and even Hong Kong can testify.⁴¹

Higher-educated individuals are more likely to move than others, and other regions frequently accrue the economic benefits of these workers.⁴² Undoubtedly, migration between regions and countries is critical; the free movement of people facilitates economic growth by matching the right workers with the right jobs and spreading information and ideas to new places.⁴³ Although some “brain drain” is natural, there are ways to retain talent: investing in key assets (good schools, sound infrastructure, and quality of life amenities, etc.), maintaining a strong alignment of workers to employers, and creating an inviting and open culture. And even when educated residents are exported from one region to another, the exporting region reaps the benefits of the inter-metropolitan connections those ambassadors can sew between their old home and their new home. The steady exchange of engineers between Indian metropolitan areas and Silicon Valley is one of many examples.

However, higher levels of education alone do not magically expand a region’s economy. Productive growth occurs when metropolitan areas can properly train workers in the skills that are in demand and effectively match such talent with the right jobs.⁴⁴ Paris is especially successful at linking graduates to local jobs in a wide range of sectors beyond financial and business services, including automotive R&D, nanotechnology, gene therapy, animation, and aeronautics.⁴⁵

The discovery and commercialization of technological and scientific innovations typically demand more than just human capital. They require advanced research and development. Because R&D is complicated and expensive, a single firm or institution cannot always achieve large-scale breakthroughs alone. A persistent hindrance to developing a culture of knowledge and innovation is the frequent separation between the research institutions and universities creating knowledge and the firms involved in using new information to create and commercialize new products and services. Local, inter-regional, and even international collaboration between universities, research labs and private firms is critical.

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Identity**TEL AVIV**

Despite its distance from core markets, Tel Aviv has gradually emerged as a unique ecosystem for innovation and the commercialization of ideas. City leaders first openly endorsed the benefits of commerce and entrepreneurial capitalism a century ago, encouraging a can-do spirit into successive generations of middle-class immigrants. The initially unplanned concentration of skills and capital later proved capable of resisting national population dispersal strategies from the 1950s forward.

Business networks between venture capital firms and start-up companies flourished in the postwar period, not the least because of an inherited cultural and political propensity among Tel Aviv's high-tech community to minimize hierarchy and gamble on opportunities. Moreover, the urgent demand for military IT solutions resulted in a large proportion of the urban population acquiring high-tech skills and improvisational acumen from their time in the military. Tel Aviv entrepreneurs frequently moved their headquarters to the United States and yet were confident to leave research and development responsibilities to Tel Aviv branches because of the accumulated skill base; a robust 37 percent of Tel Aviv's population was college educated in 2008, placing the region among the most highly educated in the world.⁴⁶



After a period of neglect and depopulation, the city's entrepreneurial and commercial class mobilized in the 1980s to urge government leaders to launch new postindustrial infrastructure initiatives.⁴⁷ These were intended to attract multinational companies and accompanying knowledge-rich workers to supplement existing skills in finance, optics, communication, information systems, medicine, and software.⁴⁸ Tel Aviv's technology cluster now has a distinctively supportive early-stage investor arrangement; local leaders such as internet pioneer Jossi Vardi have created a culture of mentor-novice knowledge exchange.

The city's knowledge assets have been effectively positioned under Ron Huldai's mayoral stewardship since 1998. Municipal and national governments have promoted a suite of initiatives under the "Tel Aviv Global City" banner to enhance the visibility and voice of new foreign communities, and to expand the international student population.⁴⁹ Leaders' active support of pluralism, lifestyle tolerance, and scientific achievement, alongside readily available business finance, have addressed the twin needs of early-stage firms as well as transnational operators, and fostered a vibrant atmosphere attractive to new creative industries.⁵⁰

To view other examples supporting this trait, see the case studies for Boston, Helsinki, Oslo, San Francisco and Zurich.

TRAIT
6

**OPPORTUNITY AND
APPEAL TO THE WORLD**

Metropolitan areas that are open and opportunity-rich often serve as magnets. They draw in global investment, new businesses, skilled workers, entrepreneurs, immigrants, foreign students, tourists, and/or business travelers from around the world. These markets not only offer compelling economic prospects for families and firms. They are synonymous with strong and predictable business climates, attractive settings, unique cultural assets and experiences, inviting and accepting attitudes and lifestyles, and/or respect for religious and personal freedoms and diversity. In return, immigrants spread information about that city through their family and business networks, thereby reinforcing the global appeal.

London embodies how opportunity and appeal can drive global fluency through multiple business cycles. The British capital has been a beacon for those seeking a better or more peaceful life for over 600 years. But it is not only large global cities that exemplify this trait. Cape Town has a history of openness and diversity that stems from its role in early international exploration and trade. This manifests itself today in a city that is highly outward-facing, pluralist in composition and ideas, and which offers opportunities for creativity, livability, and entrepreneurialism.⁵¹

Opportunity and appeal evolve over time in cities, both organically and intentionally. In cases such as Miami, its widespread appeal is the result of many unplanned occurrences and uncontrollable forces, including “the cross-cultural affinities of Miami’s ethnically hybrid workforce, many of whom originated elsewhere.”⁵² But cities such as Barcelona have succeeded in cultivating a youthful appeal and public space attraction on a much more intentional basis, thanks not least to the efforts of mayors Pasqual Maragall and Joan Clos.

These metro-area traits, however, are highly influenced by the level of appeal and openness in the larger nation. A nation (and state) and its associated government and culture create many of the rules, regulations, parameters, and societal norms that set the stage for how attractive and alluring its sub-regions are to a global audience (see Trait 9). Historically it has been North American and Western European governments that have been most prepared to encourage openness, transparency, meritocratic norms, and reward corresponding to risk. But in the last 30 years, many other nations have begun to foster political and societal frameworks that also have trans-cultural appeal. Among them are Chile, Turkey, Taiwan, and several Gulf states. More metropolitan areas than ever have the space to rise up relatively unimpeded and present their case to a global audience.

Other international cities and their respective countries lack a high level of openness, which limits the achievability of global fluency. South Korea is very outward focused and is home to perhaps the world’s best trade and investment promotion agency (KOTRA). However, Seoul is not known as a city where foreigners can easily assimilate; as of 2008 only 1 percent of its population was foreign-born.⁵³ Meanwhile Sri Lanka, and therefore Colombo, has been unable to pursue its global potential having been held back for decades by civil war and violence.

As more nations seize economic opportunities, and historically more open societies experience challenges around immigration, national security, and government debt, a leveling of the playing field is gradually taking place. This provides more metropolitan areas from around the globe with an opportunity to distinguish themselves, and become exemplars of fairness, civility, glamor, and reward.

TRAIT 1Leadership with a
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Connectivity**TRAIT 8**Ability to Secure
Investment for
Strategic Priorities**TRAIT 9**Government
as Global Enabler**TRAIT 10**Compelling Global
Identity**BROOKINGS****METROPOLITAN****POLICY****PROGRAM****LONDON**

London's record as a symbol of opportunity, diversity, and tolerance may be prouder than any other world city. The British capital has a remarkable record of attractive professional development across nearly all job sectors—finance, law, media, medicine, wholesale and retail, transport, and engineering.⁵⁴ Additionally, it also has a scarcely interrupted millennium-old tradition of acceptance toward different ways of practicing religious, political, and family life. The sanctuary provided to generations of poor, persecuted, and war-torn populations was a major early catalyst to the city's awareness of new manufacturing innovations and methods of commerce.

Later, relations built up during Britain's imperial rule reinforced London's reputation as a city of opportunity. Imperial expansion created very intimate transnational trade and investment relationships that also made London a first port of call in times of crisis. This was not just true of areas of direct British control. From 1850, London's East End became a haven for immigration from Eastern Europe, while Italian and Chinese groups also took advantage of the city's improved accessibility by land and sea in the new maritime order. London also became a center for Irish populations fleeing poverty and famine. These varied immigrants were drawn by booming employment opportunities, freedom of belief, speech, and expression, and comparative immunity from the iniquities of the trade cycle.⁵⁵

A common language, educational, and legal framework coupled with trade ties—all a product of colonial rule—generated, and continue to generate, a profound resonance for London among populations in South Asia, the West Indies, and West and East Africa. In the last half century, a preparedness to house those fleeing conflict has further diversified its population base, producing an incredible array of social habits side-by-side.

Since the deregulation of financial markets in 1986, known as the "Big Bang," London's appeal for skilled migrants has proven an indispensable economic driver. In the last decade almost one-third of high-skilled workers have come from abroad.⁵⁶ Successive national governments have guaranteed more flexible labor laws alongside open visa-free access to the EU labor market. The retention of openness to flows of transnational skilled labor and foreign firms has been critical not only to specialized production functions in global business networks, but also to London's emergence as a world capital of higher education. Over 50 universities and related institutions attract huge numbers of international students and faculty, who in turn enter the London labor markets and innovation systems, bringing with them, and reinforcing, cosmopolitan diversity, creative friction, and global reach.

London's dominance as an international banking center over the past 30 years has relied upon the combination of "in-sector" innovations combined with the attraction of international talent. Despite perceptions of over reliance on finance and banking London has proved to be a stubbornly diverse economy. In medicine, media, and digital industries the same basic ingredients of leading sector innovations combined with an open city with deep labor markets and cosmopolitan livability have created the same winning formula.

Today, amid pressures to close ranks on immigration and trade, London has become more organized around lobbying and advocacy for a competitive business climate. Business leadership bodies such as London First and the City of London Corporation have been influential in persuading national governments to retain the capital's entrepreneurial and magnetic edge.⁵⁷ This mirrors nearly a millennium of City of London diplomacy to position London as a vanguard trading location.

To view other examples supporting this trait, see the case studies for Barcelona, Cape Town, Los Angeles, San Jose, and Sydney.

TRAIT
7

**INTERNATIONAL
CONNECTIVITY**

Global success, first and foremost, requires global reach. Connectivity remains critical in a modern economy where competitive advantage is in part determined by the effective point-to-point movement of goods and people within and between regions. Firms rely on both local transportation systems and global freight infrastructure (airports, ports, rail, and road networks) to take their products to the international marketplace in the most cost-effective manner possible. Metropolitan areas such as Hamburg, Miami or Shenzhen leverage their infrastructure not only to minimize transportation costs for firms, but also to expand their economies and create jobs through their distinct specializations (Trait 3) in warehousing, transportation, and logistics.

Beyond moving goods, metropolitan economies must connect people. A recent Brookings Institution report found that international aviation connectivity delivers real benefits to metropolitan economies by empowering face-to-face interaction between businesses and decision makers.⁵⁸ Popular air hubs in Zurich, Amsterdam, and Dubai enable medium-sized cities to be globally connected and generate links with top networking and decision-making centers. When transportation barriers prevent in-person meetings, metropolitan areas can cement international links digitally.⁵⁹ Indeed, mobile technologies have revolutionized communication and learning in parts of the developing world. People-to-people connections also serve as a foundation for international migration, with the corresponding impacts migrants have on urban economies.⁶⁰

Regions must also address issues of local accessibility. The competitiveness of a regional economy hinges on its ability to effectively connect its people and physical assets to their best use. This depends not only on the level of investment and geographic coverage of local infrastructure, including roads, rail, public transportation, and bike and walking paths, but also the spatial arrangement of households, businesses, and amenities in relation to that infrastructure, or

what economic developers call “spatial efficiency.” Beyond minimizing transportation and communication costs, clustering economic activity near multimodal infrastructure points can also facilitate interaction, knowledge spillovers, and innovation.⁶¹

This is a particularly urgent priority for emerging world cities. A 2013 McKinsey Global Institute report points out that the world needs to spend approximately \$2 trillion a year on upgrading infrastructure, from roads and rail to power grids and water and telecom networks. Emerging cities bear a sizeable burden that

threatens to consume valuable budgetary resources. Globally-focused leaders managing this local infrastructure and transport agenda will need to create robust long-term infrastructure portfolios, speed up approval processes, and encourage much stronger coordination between overlapping city departments.⁶²

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Investment for
Strategic Priorities**TRAIT 9**Government
as Global Enabler**TRAIT 10**Compelling Global
Identity**BROOKINGS****METROPOLITAN****POLICY****PROGRAM****CHICAGO**

For centuries, connectivity has contributed to Chicago's global engagement and has allowed it to become America's most internationally significant non-coastal region. Ever since a group of local leaders effectively positioned the city as a hub for both national canal and railroad links in the nineteenth century, the region has served as a key center for transportation and trade. Chicago has more highways entering the region than any U.S. city.⁶³ As an intersection for six of the country's seven largest railroads, it remains a key, if congested, node in the North American rail network. The region's airports, anchored by the O'Hare and Midway International Airports, moved more than 7 million international passengers in 2011, the fifth highest in the country. These air connections have real economic benefit. They solidify Chicago's position as a globally accessible business hub and allow millions of visitors access to the city's well-regarded art, architecture, food, music, theater, and sports, which together contributed to the region's \$5.6 billion in tourism exports in 2010, Chicago's third largest export industry.⁶⁶



Recent mayoral administrations have acted to solidify and enhance the region's existing infrastructure advantages. In 2005, Mayor Richard M. Daley initiated an ambitious \$6.6 billion modernization plan to reduce delays and increase traffic at O'Hare. Current mayor Rahm Emanuel has bolstered this plan with an additional \$1.4 billion as part of his 2012 infrastructure plan.⁶⁷ Physical connectivity also enables Chicago to be a destination for workers and families. Currently, 18 percent of the region's population is foreign-born, compared with 13 percent nationally.⁶⁸

Chicago's global performance also depends on how well the region's transportation system can move goods and people locally. Here, like many U.S. regions, greater Chicago's performance is more mixed. The city boasts one of the more comprehensive public transit systems in the country. But the region struggles in connecting workers to jobs. Nearly 80 percent of the metropolitan area's working-aged residents lives near a transit stop (the average among top 100 U.S. metropolitan areas is 69 percent), but only 24 percent of the region's jobs are reachable via transit in under 90 minutes, well below the 100-metropolitan area average of 30 percent.⁶⁹ Decades of sprawl have pushed two-thirds of jobs beyond 10 miles of downtown; the second highest percentage among the top 100 U.S. metropolitan areas.⁷⁰ These challenges have been acknowledged by the region's leadership, which has recently stressed additional transit investments as well as alternative forms of travel, including bike lanes and car-sharing programs.

To view other examples supporting this trait, see the case studies for Barcelona, Busan, Hamburg, New York, Shenzhen and Singapore

TRAIT
8

**ABILITY TO SECURE
INVESTMENT FOR
STRATEGIC PRIORITIES**

The success of a metropolitan area in the global economy is highly dependent on its ability to attract investment for local priorities. It must be able to assemble deals from a wide variety of public and private sources.

Investment is not just a means to create assets. It is fundamentally how metropolitan areas adjust to new requirements and opportunities. Whether it is new infrastructure, groundbreaking research capability, better quality of life amenities, or increased housing supply, investment is the tool that enables metropolitan areas to grow and change, and to achieve a better international orientation. This is especially evident in Chinese cities, including Nanjing. Development zones were a major investment boost for the city's electronics and software competitiveness in the 1980s, creating a cycle of high public revenues that have since enabled important upgrades in fiber optics, subway infrastructure and bridges. As a provincial capital, Nanjing has had the financial flexibility to invest in high-quality industry parks in fields such as software animation and power grid automation, and thereby develop a clear export specialization.⁷¹

The Chinese cities model, which has been significantly guided by state-led investment, is by no means typical, however. Today, much more investment capital in metropolitan areas comes from global sources, and it is allocated through international competitive processes that weigh different locations and asset classes against one another.⁷² This means that globally oriented metropolitan areas have a better chance of attracting capital because they can align with the needs of both public and private investors through their value added development strategies, compelling identity (Trait 10), and focused leadership (Trait 1). Metropolitan areas that have a long-term path to success have a basis for attracting external investment partners.

Attracting investors also requires that local leadership pay deliberate attention to how investment is facilitated and managed. The investments begin with three main conditions that are synchronized and sequenced through strategic planning and sound project management:

- **A public finance system** of taxes, transfers, levies, charges, and loans that delivers enough investment to cover core public goods, services, and assets and also creates an effective structure of incentives and opportunity for private sector co-investment.
- Solid opportunities for global **commercial and institutional capital providers** to find ready investments, organized in ways that make appraisal simple and provide both a stable and dynamic environment for asset performance.
- Dynamic markets, ease of access, and a solid platform for business success that draws **corporations and small- and medium-sized enterprises (SME)** to the metropolitan area.

Being an “investment ready” region means being able to leverage public finances, capital allocations, and corporate location decision-making to create a positive cycle of capital flow. In a climate in which sovereign wealth funds, foreign pension funds, and other foreign investing vehicles have trillions in capital to invest, it means deliberately preparing and packaging investment opportunities so they are easy to appraise. It also means promoting both the potential internal and external rates of return, and the area's commitment to enabling investments to succeed.⁷³

TRAIT 1

Leadership with a
Worldview

TRAIT 2

Legacy of Global
Orientation

TRAIT 3

Specializations with
Global Reach

TRAIT 4

Adaptability to Global
Dynamics

TRAIT 5

Culture of Knowledge
and Innovation

TRAIT 6

Opportunity and
Appeal to the World

TRAIT 7

International
Connectivity

TRAIT 8

Ability to Secure
Investment for
Strategic Priorities

TRAIT 9

Government
as Global Enabler

TRAIT 10

Compelling Global
Identity

BRISBANE



In the 1990s, Brisbane faced challenges in attracting investment, given a lack of financial services and a limited culture of partnership with the private sector. However, its local city council is a strong example of a consolidated (single tier) metropolitan council with a budget that exceeded \$1 billion. In recent years, the council has used its financial capacity to facilitate economic development and urban renewal, and ultimately to reverse an under-par investment record.⁷⁴

The council has led a wide range of joint ventures, sponsored business conventions and sporting events, and convinced the Queensland state government to prioritize Brisbane for transport infrastructure funds, including for the Legacy Way toll road. An ambitious TransApex transportation plan has drawn on public and private investment and has dramatically lowered congestion in a growing region. Public-private partnerships have delivered the \$3 billion Clem7 toll tunnel project, and the \$5 billion Airport Link toll road.

Brisbane has also overcome weak coordination in organizing incentives for SMEs and global firms and has committed to offering a resilient business environment and a reliable fiscal regime. A city council subsidiary, Brisbane Marketing, successfully links local partners to international networks of digital, gastronomy, and logistics firms, while an Ambassadors program maximizes expatriate investment connections. A 2012 Economic Development Plan incorporates a thorough outreach agenda to Chinese, Japanese, and Malaysian resource firms amid an ongoing commodities boom, which will trigger new, diversified investments.

To view other examples supporting this trait, see the case studies for Bangalore, Chicago, Istanbul, Miami, Moscow, and Shenzhen.



TRAIT
9

**GOVERNMENT AS
GLOBAL ENABLER**

National, state, provincial, metropolitan and local governments have unique and complementary roles to play in enabling firms and metropolitan areas to “go global” and stay global. Governments are needed to provide visible leadership and on-the-ground advocacy on behalf of regional business in foreign markets. They are also needed to correct market failures that limit opportunities for certain sectors and populations. Mayors, governors, ambassadors, and heads of state have a unique capacity to open doors for business delegations in overseas markets. The aggressive, cohesive, and well-resourced trade and investment programs of China, Germany, Japan, and Korea, for example, prove indispensable in opening doors globally for their respective firms and cities.⁷⁷

At the city and metropolitan level, strong local mayors can be critical to the global fluency and engagement of a region. Through their positions as the top (appointed or elected) officials, mayors can convene key local leaders around critical topics. They can exert influence by supporting vital initiatives, making them more likely to take root. Further, top locally elected officials have unique and collective power to advocate nationally for policies that impact cities and metropolitan areas. They can help national governments be greater enablers of global competitiveness.

State (province) and national governments set the tone and platform for how globally engaged or fluent a given metropolitan area can aspire to be by establishing the level of transparency, security, dependability, and predictability. These governments play certain roles related to global success that the private sector cannot, such as establishing the tax climate, implementing regulations, crafting immigration policies, investing in necessary resources and infrastructure, and (at the national level) signing free trade agreements. They also provide export finance guarantees and credit to support large foreign sales that private banks cannot or will not take on alone. Finally, they can support SMEs whose global reach would otherwise be limited. This implies that for metropolitan areas to maximize potential in international markets, they must win a high level of support, engagement, and investment from national and state governments.

In certain cases, the outsized influence of national governments can even shape the productive platform and specializations (Trait 3) of a region, as in national capitals such as Moscow and Tokyo, and military hubs such as Tel Aviv and San Diego. Further, the public sector usually plays a role in addressing the downsides of globalization by investing in education, crafting a fair tax system, and assisting in the retraining of workers in industries dislocated by global competition.

Analysis of cities globally shows that in many emerging nations, and some developed ones, regional and national governments lack a history of partnership on global issues. They often have insufficient resources to address and prepare for all the ramifications of globalization. Often processes of decentralization have been approved without clarity of roles, responsibilities, and purpose between government tiers. In these cases the national tier rarely understands the unique specializations and potential of their metropolitan areas in relationship to global success. The task of making the case to such governments is sometimes painstaking but nevertheless necessary.

In other societies where there is a strong tradition of private sector-driven commerce, business and media interests do not always understand the government's key role in globalization. Instead of encouraging elected officials to engage globally, local firms and newspapers are often skeptical and critical of overseas trade missions.⁷⁸ In these cases, it is imperative that public officials have a plan for global trade, investment, and interaction and better clarify the benefits and critical nature of these trips.

Cities within regional and national governments that understand globalization and its challenges have a significant advantage. Cities with a sound business climate have an advantage from the outset, but governments can still hold progress back with confusing policies and underfunded, uncoordinated trade and investment efforts. The ambition for all cities pursuing global fluency is *alignment* across government tiers, one that can withstand electoral change. Here the distinct roles at each tier are clarified, differences discussed and resolved in an even-handed manner, and the opportunities for global success are dramatically increased.

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as Global Enabler**TRAIT 10**Compelling Global
Identity**CASE EXAMPLE: MUNICH**

For more than half a century, Munich has gained from assertive leadership at the regional and state levels. The Bavarian government has a stable relationship with Munich, which is conducive to strategic planning and long-term service delivery. Bavaria has long recognized the role of spatial management and infrastructure stewardship in the region's innovation capacity and has duly overseen a steady upgrade of rail, road, and air services during the past four decades.⁷⁹ Groundbreaking infrastructure projects and strategies have been implemented with a confidence that accompanying political mechanisms will be effective and efficient.⁸⁰ Since the early 1990s' challenges of reunification, state government has spearheaded an imaginative 20-year innovation strategy, drawing on the strength of public research and public-private commercial networks.

Government shareholdings, for example, have been leveraged to accelerate entrepreneurial agendas such as "The Future Bavaria Initiative" and a series of cluster programs, which together are strengthening Munich's presence as a cutting-edge scientific and clean technology center.

Munich has also benefited from favorable frameworks and priorities at the federal level. As early as the 1960s, the federal government recognized the clustering taking place in automotive and aerospace manufacturing. It moved to support technology development by directing federal research agency locations and considerable military technology investment to the region. Influential regional politicians, such as Franz Josef Strauss and Hans-Jochen Vogel, became highly effective national lobbyists for federal investment in Munich's science industries, universities, and urban renewal. Amid recent state-level funding shortages, national high-tech R&D strategies have provided crucial financial awards to the city's biotechnology sector, while feed-in tariff laws have stimulated demand for green energy products, of which Munich is a key provider.⁸¹ Meanwhile, the federal planning system has incorporated a clear delegation of land-use powers, which fosters a strategic approach toward land (especially brownfields) that has met the needs of different company sizes. Further, Munich benefits from Germany's robust and highly regarded global trade and investment arm, which is considered a world leader in opening doors for firms in overseas markets and attracting foreign direct investment.



Government shareholdings, for example, have been leveraged to accelerate entrepreneurial agendas such as "The Future Bavaria Initiative" and a series of cluster programs, which together are strengthening Munich's presence as a cutting-edge scientific and clean technology center.

To view other examples supporting this trait, see the case studies for Brisbane, Hamburg, San Antonio, Shenzhen, and Washington, D.C.

TRAIT
10

**COMPELLING GLOBAL
IDENTITY**

The most globally fluent metropolitan areas demonstrate a combination of appealing identity, high standards and reputation, and global relevance in specific markets. Establishing and managing a compelling brand image in global markets not only helps sell the city, it also shapes and builds the city. It provides city leaders with the glue that can join people and institutions in a common spirit and purpose. Cities must manage change, adjust to dynamic trends, and shape their futures; however, without an enduring city identity, this is much harder to do, and the outcome is less effective.

Increased globalization and global engagement require that metropolitan areas are clearer, and more self-aware, about who they are and what they intend to be. Globalization opens up opportunities for metropolitan areas, but it also exposes weaknesses and doubts. Identity provides confidence; it helps cities make decisions about priorities.

Identity also provides metropolitan areas with a means to act coherently across different markets where opportunities are contested through international competition. These include attracting residents, visitors, students, investors, corporate and institutional locations, capital investment, facilities, and events and conventions. The most globally fluent metropolitan areas attract more than their share of these contested opportunities. They are places that leverage the interaction between different opportunities, recognizing that international students can become trading entrepreneurs, convention attendees may well decide to relocate, or tourists may also be investors.

Successful metropolitan areas leverage a coherent identity across these markets. They do not have one play for tourists and another for investors, residents, students, or institutions.

Global identity is not just about having a slogan, logo, or marketing and sales strategy. These may be useful, but not all globally successful metropolitan areas have or need them. Equally, identity is not

just about tourism and visitor economy, or attracting new populations, although most globally successful metropolitan areas do these things well. Identity is about integrating the set of assets, ideas, values, opportunities, and aspirations that a metropolitan area has and the effectiveness of its communication.

Successful identity-building always has catalysts. Barcelona Football Club is reputed to be the best soccer team in the world, the Bolshoi Ballet is first in class, the Empire State Building is a global icon, and the BBC is a world renowned media institution. It is not

simply the presence of these assets in Barcelona, Moscow, New York, and London that helps each metropolitan area succeed. They succeed based on the ability to use these inspirational organizations and icons to distil and project a deeper sense of identity and values by collective association with the organizations that they host.

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as Global Enabler**TRAIT 10**Compelling Global
Identity**CASE EXAMPLE: BARCELONA**

The program of economic and political modernization overseen by Barcelona's leaders since the early 1980s has combined in novel ways with a distinctive, pre-existing identity and architecture to produce a highly creative and stylish image to the world.

Under visionary Mayor Pasqual Maragall, Barcelona deliberately and effectively communicated its multi-lingual, recreational, and cosmopolitan personality, and invigorated this character with high-quality urban and waterfront design.⁸²

City leaders embraced the scale of Olympic preparation for 1992 to mobilize public and private stakeholders for urban revitalization and new forms of place-making. The technical and political elite endorsed the role that art, architecture, design, and sport could play in capturing the imaginations of local and international audiences.

The consolidation of a unique brand has been a key tool for converting Barcelona's aesthetic exhilaration—embodied by Barcelona Football Club—

into business dynamism. Despite continued economic and fiscal challenges, the freshness of its entrepreneurial leadership has translated into an ethos of learning from others, and into bold investment in “next cycle” sectors such as mobile technology and electric vehicles. It also informs Barcelona's new ambition to become a capital of the Mediterranean, with a global inspiration for smart urban design and progressive technologies.⁸³



To view other examples supporting this trait, see the case studies for London, New York, San Jose, Singapore, and Sydney.



V. CONCLUSION: DEFINING YOUR METROPOLITAN AREA'S PATH TO GLOBAL FLUENCY

More cities than ever are participating in the new cycle of globalization. For the newcomers, and even for those with some global experience, there is no quick-fire route to global fluency. Global fluency is about characteristics and benefits accumulated over multiple business cycles. Accumulation of assets ultimately translates into intentional participation in international markets. In other words, today's intentional efforts will become tomorrow's inherited features.

Economists and historians generally agree that the year 1500 marked the beginning of a truly global economy, characterized by a worldwide division of labor, multilateral trade, and capitalist norms.⁸⁴ Since that time cities have tended to embrace international opportunities in waves and cycles (see table). These waves are often based on the geopolitical events, important industries, and transportation and communication technologies that defined an era.

There are observable time lags between one wave and the next. After the 1973 oil crisis, for example, economic stagnation and Cold War political divisions saw most cities, nation-states and continents turn inwards. The agendas of national governments dictated that economic integration would only be pursued at a regional level. Cities were only able to begin or resume globally-oriented paths once a new

international consensus around liberalization was built after 1980. More recently, greater economic openness and the fast-changing shift in global growth patterns has meant that the interruption before a new wave of cities joined global paths has been shorter, and in a few cases has even overlapped with the previous wave.

Looking back at these waves, the period when a metro area first intentionally pursued becoming a global city affects the overall level of global fluency today. Those cities that first became intentional over 100 years ago, such as London, New York, Vienna, and Hamburg, tend to be the most globally fluent, unless they fell into irreversible decline (in the case of Genoa, for example).

CITY GLOBALIZATION, 1492 TO PRESENT⁸⁵

	Cities to enter a global path	Trends affecting character of globalization	Key tradable products
1492-1650	Antwerp, Genoa, Istanbul, Venice	Discovery of the Americas and the Cape Route; integration of European and Asian market; rise of the East India Company; high European peasant mobility; improved transactions efficiency.	Spices, slaves, sugar, gold, silver.
1650-1780	Amsterdam, Guangzhou, London, New York	Growth of finance, services, and pre-industrial manufacturing; early democratization; rise of fiscal-military state.	Rice, tobacco, tea, credit, finance.
1780-1850	Berlin, Paris	Divergence between Europe and China/Asia; East replaces America in British trade.	Cotton, coal, iron, steam.
1850-1914	Bilbao, Liverpool Manchester, Rotterdam, Vienna	Technology step-change; accelerating flow of goods and capital; lower trade barriers and transport costs (railways/canals); high migration; stable global currency (£). ⁸⁶	Steel, ship-building, machine tools, chemicals.
1945-1973	Munich, Seoul, Singapore, Tokyo, Toronto	New international economic and regulatory framework; U.S. dollar as monetary foundation; increased labor movement; Europe-East Asia trade surge; information-based logistics.	Manufactured exports (e.g. automotive); components from different stages of production; electronic information; textiles, other labor intensive goods.
1985-2007	Bangalore, Barcelona, Chicago, Sydney, Tel Aviv	Declining cost of processing, storing and transferring information; reduced political trade barriers; liberalization of emerging economies; rise of China and 'South-South' trade; rise of international supply chains; containerization.	IT innovation; consumer electronics; services - (legal, accounting, consultancy, advertising); tourism.
2010-	Colombo, Nanjing, Brisbane, Sao Paulo	High commodity prices; innovations and regulations in transport; consumer demand from emerging markets; more global investment rules; more even R&D competition.	Chemicals and commodities, design and digital sectors, ICT, transport equipment; life sciences ; convergence technologies; higher education; all knowledge services.

Another wave of cities, including Singapore, Toronto, and Munich, were driven to become more intentional by unique circumstances and opportunities after World War II. These cities are now in their third generation of global engagement, and have learnt from experience about the volatility and growth challenges of globalization.

The most recent cycle has occurred during the past 25 years, when cities such as Barcelona, Chicago, Sydney, and Tel Aviv became more intentional about their global prospects. Those efforts continue to propel them to the front of the pack today.

The most recent era of globalization is the broadest and most comprehensive of any in history. The global economy no longer revolves around a handful of dominant states and their national urban centers. Nor does it only offer success to cities with established wealth, strategic location or access to material resources. Unlike in the past, cities do not need to be on trade routes, act as military fortresses, be capital cities, or centers of global finance, in order to be world cities.

Instead, globalization is much more defined by people, knowledge, technology, and communication. Aspiring cities may still become financial centers or headquarters hubs, but in the new cycle they need to excel in these soft factors as well as in the hard factors that were needed in the past. This means that although the first-mover cities retain considerable advantages, there is no enduring monopoly of the assets that matter; they are more evenly distributed (and distributable) among all nations and metropolitan areas. History still matters, but metropolitan areas therefore have more opportunities than ever to plot their own course, and intentionally develop global reach.

Metropolitan areas can take, and have taken, several paths into globalization. The sequence of global engagement for the 42 cities covered in this study shows that the pathways toward global fluency usually take place in three phases.

Whichever path a city takes, and whichever assets it leverages, it first acquires or develops one or two of the 10 traits in sufficient depth or critical mass such that it becomes aware of global markets and opportunities.

Then, after two decades or more, the more purposeful (or sometimes fortunate) of these cities are able to leverage their initial traits and acquire a succession of additional traits. Over one or two economic cycles an expansion of outward-facing engagement occurs, and these cities become energetic participants in (and beneficiaries of) international trade. In this phase cities become fully oriented to global trends in key sectors.

In the third phase of the pathway to global fluency, a city may extend and reinforce existing traits, and in some cases accumulate further traits. Metropolitan areas that reach this phase become better-rounded and experienced regional economies. By the third phase many metropolitan areas may no longer exhibit original traits as strongly, usually due to different sources of growth in the global economy and different local and national political circumstances.

We have identified at least four pathways cities commonly undertake in pursuit of global fluency, although there are likely several more. Some have been embarked upon in previous waves of globalization, and others have only become possible more recently. We believe they all have application today as sources of insight and inspiration to cities in the early stages of global engagement. These pathways help show how newly globalizing cities and metropolitan areas can build and combine traits of their own, through purposeful and thoughtful action. In all of these path examples, leaders in either the public or private sector have grasped the global opportunity and the city's unique strengths and ensured that these are updated and effectively complemented by new traits as they proceed to compete in global markets.

PATHWAY 1: MULTI-CYCLE TRADE CITIES WITH LONG HISTORIC ROOTS

London, Zurich, Hamburg

The history of cities participating in globalization shows that many first begin to operate as international trading hubs because of inherited factors favoring commercial exchange. These include strategic location, access to resources, political stability and proximity to a network of other commercial centers. Their 1st phase of engagement with the wider world is also fundamentally linked to specializations in fields such as finance, shipping, and textiles, which arise in tandem with a new ethos of trade.

In a second phase of international orientation, these cities achieve a high degree of independence to carry out their commercial activity, as part of self-conscious elite trading networks. Zurich, Hamburg, and London, for example, all achieved a precedent of a high degree of political autonomy. Although this can periodically be threatened by ambitious national leaders or during wartime, the wealth and power of the trading communities have ensured that commercial interests are not overridden for more than one political cycle. These business leadership groups adopt a deliberate and strategic approach to global commerce, mindsets which once in place do not tend to disappear. They ensure that connectivity infrastructure linking other cities—whether by sea, air or rail—is expanded and maintained as a matter of course, often by using public investment surpluses. Such attention to core assets is visible today, in Hamburg’s routine expansion of port capacity, and the forthcoming London Gateway port and logistics hub.

This phase is also significant in that the wealth and opportunities these cities offer make them popular places of refuge and immigration when conflict, persecution, or disease afflict foreign groups. These cities acquire a tenacious reputation for being a safe haven for entrepreneurs, families, and capital—for example Zurich’s peerless status for private banking. This open character is enduring and largely continuous, although it is sometimes interrupted by phases

of hostility, violence, and isolation usually set into motion by national regimes. In the aftermath of such episodes, these cities tend to be at the vanguard of a new cycle of internationalism.

After several generations, and indeed centuries for those that began this pathway more than 500 years ago, these cities enter a qualitatively new phase when new kinds of production begin to transform the economic system. Whether industrial or post-industrial, wealthy and now diverse trading cities have the variety of skills and information to adjust to new human capital demands, working practices, and infrastructure and design needs. At this point these cities’ knowledge and innovation capacities come to the fore, boosted by advanced higher education institutions. The increasingly international character of education, culture, and sport means the most globally fluent of these cities are able to forge compelling brand associations, usually linked to vibrancy, professionalism, and opportunity. Other historic trade cities struggle to make the adjustment to becoming more open and attractive to new customers, and therefore risk becoming more homogeneous in their outreach.

The accumulation of traits in the case of historic trading cities is especially complex. The chart sequence below provides a simplified sketch of the three phases. London, Hamburg, and Zurich have been among the most effective in the world at achieving the 10 traits, but in practice each has only successfully exhibited all 10 traits at once for very brief periods of time. This is because traits can slip away even more quickly than they are built up. In London’s case, for example, the full set of 10 traits was arguably achieved simultaneously in the mid-2000s, with a new independently-elected mayor with a favorable cycle of investment from central government. But the city’s enabling government and connectivity traits appear now to be potentially threatened amid severe concerns about airport connectivity and current immigration restrictions. No city can expect to possess the full set of traits for long.

PATHWAY 2: RIDERS OF THE WAVE OF OPPORTUNITY OF THE 20TH CENTURY

Examples: Munich, Singapore, Toronto

These cities are distinctive for achieving a productive regional consensus about global economic positioning, which translates into global competitiveness during times of rapid development and growth. In order to first become globally aware, they require their location and relative national importance to become more strategically important when global market dynamics shift. They have not always been the dominant economic power in their region, but profit from a conjunction of historical events; these can be:

- the declining political fortunes of neighboring financial centers (as was the case for Berlin and Montreal, benefiting Munich and Toronto respectively);
- sudden proximity to new booming markets (Central Europe, the Asia-Pacific, and the north-eastern U.S. seaboard respectively);
- new opportunities to develop imperial trade and population links (growing labor mobility boosted migration from Asia to Canada, and from southern Europe to Germany; Singapore's connections with Hong Kong, India, and the U.K. were critical to its early export economy).
- abrupt changes in legal and regulatory climate preferences (favoring Singapore and Toronto's English-based systems).

At the same time as geographical and historical events turn in their favor, the global potential of these cities is harnessed by an era of regional alignment and national-level support. Various forms of political independence, metro-wide government, federal initiative, and rational state engagement ensure high levels of infrastructure investment and beneficial tariff and sector policies.

For these opportunist cities, these first two traits together—historical catalysts and an enabling

government—create a platform to become more globally oriented. Over a period of 10 to 20 years, government supervision and market demand resulted in the creation of targeted specializations, in fields such as advanced manufacturing, aerospace, and media. A city taking this pathway needs to be able to secure investment for its economic priorities, whether through channeled state government funds or the devolution of more metro-level financing powers. This in turn tends to ensure a more rapid construction of a competitive logistics and connectivity platform, such as Toronto's first subway line in 1954, and Munich's new airport in 1992. Such a dynamic combination attracts international-class knowledge institutions, especially in fast-growing, flexible fields such as science, medicine, and engineering. Within just ten years, Munich attracted Siemens to relocate from Berlin, two federal military research universities and Max Planck Institutes in Physics and Cellular Life Sciences. More recently, Singapore has even attracted campus partnerships with MIT, Yale, Insead, and NYU. The new business community in these cities becomes highly aware of global trends and develops influential leadership networks that promote a global outlook, both in terms of exports and immigration.

Cities on this pathway usually enter a third phase within 40 to 50 years. By this point, original positional advantages may be less obvious. These cities have diversified across R&D and services sectors, and have established trade partners achieved through reliable air links and a large banking and insurance presence. The previous wave of housing and transport infrastructure investment leaves a model of livability that draws new immigrants and tourists for several decades. The most successful cities of this type have, in this third phase, a mature culture of internationalist leadership that intentionally manages integration challenges and continues to secure timely investment. Others, however, can struggle if a culture of partition opens up between metropolitan and state/federal governments. Toronto is one such example of a city whose global fluency is at risk because traits of metro leadership and national government alignment have not yet been consistent and aligned across multiple economic and political cycles.

PATHWAY 3: KNOWLEDGE LEADS THE WAY IN THE NEW DIGITAL ERA

Examples: Bangalore, Tel Aviv, Nanjing

These cities path to globalization begin from their density of tradable knowledge, skills and innovation. They become the knowledge centres of their region, due either to high-skill immigration, or because national governments choose to locate important military or scientific institutions there. In Bangalore's case, the city was chosen as an operational center for the Indian air force and other public sector industry bodies such as Bharat Electronics. For Nanjing, national public research institutes in aeronautics and military engineering were founded in 1952 and 1953 respectively. Like Boston and Silicon Valley before them, a gradual, informal concentration of commercial practices and talent congregate, with or without deliberate state or national support, and with no conscious local leadership.

In a 2nd phase, these cities gain experience while serving a domestic market or providing basic services for a small number of international companies, often led by returnees from larger commercial centres. These firms included Texas Instruments, Motorola and HP in Bangalore, and Volkswagen and Sharp in Nanjing. The clusters build up distinct ICT or technology-oriented specializations, which suddenly come into demand amid changes in global communications and tech behaviour. The national and state governments which often had paid these metropolitan areas little attention, eventually begin to initiate programs of deregulation to improve the business climate and attract sector-specific foreign investment. Government also becomes more co-operative with international trade and political norms.

While cities such as Nanjing are currently in the middle of a 2nd phase of global orientation, several cities on this path have reached a 3rd phase as their business communities strive to achieve global fluency. Some recognize the value of complementing their specialized economies with a stronger tourist and

HOW TO LEVERAGE OFF A SINGLE TRAIT: THE LESSON OF TEL AVIV

The experience of Tel Aviv shows how a city can deploy one outstanding trait in pursuit of global reach. The Israeli city once faced many disadvantages; a small domestic market, distance from the sources of growth and innovation, de-population in favor of Jerusalem, and an uncertain political and business environment. But one thing it did possess was an abundance of immigrants with commercial and technical knowledge.

An informal cluster of technology entrepreneurs built up in Tel Aviv, proficient in computer security and telecommunications. Some became highly effective ambassadors for the city when, having moved their headquarters to the United States, they left research and development responsibilities locally. Only once the eco-system between venture capital and technology start-ups had really matured did higher tiers of government initiate intentional programs to improve the business and investment climate.

In the third phase of its path to global fluency, Tel Aviv's government and business leaders recognized the value of complementing its specialized economy with a stronger tourist and lifestyle proposition. Its entrepreneurial and commercial class organized to urge upgrades to infrastructure, improved beach access, and preservation of its Bauhaus architecture. As an expanding and more immigrant-friendly metro, it has become much more appealing to foreign graduates. Over two decades, metropolitan leadership became highly strategic in managing Tel Aviv's credit rating, public spaces and pluralist reputation.

lifestyle proposition. Tel Aviv is a prominent example of a city proactively upgrading its assets to become more appealing to foreign graduates. In such cases city leadership has usually become much more strategic. Other cities on this path, however, are struggling to find the political space, or the governance and leadership arrangements, to become more open. Bangalore's experience here illustrates the daunting barriers that prevent some specialized regional economies from leapfrogging national constraints. In these cases, intentional actors tend to be more focused on winning foreign and national investment for business and civic infrastructure, so as to continue diversifying its original specialization.

PATHWAY 4: LEVERAGING ATTRACTIVENESS IN THE AGE OF MOBILE TALENT

Examples: Barcelona, Sydney, Cape Town

A group of metropolitan areas have plotted a route into globalization that draws on a distinct identity and personality that is embedded in the DNA of the city. Barcelona, Cape Town, and Sydney are three examples. In the first phase, the process of becoming globally aware often involved a handful of economic development actors recognizing that the city possesses internationally known architecture, scenic beauty, a desirable climate and outdoor lifestyle, and friendly inhabitants with a proud sense of civic and regional belonging.

But for these cities to really pursue global roles, they tend to require geographical or political disadvantages to be lifted (Trait 2). For Barcelona this was a neglectful system of authoritarian government, for Cape Town, an exclusionary apartheid regime, and for Sydney, the distance from global trade circulation. These conditions changed between 1975 and 1995, amid wider processes of democratization and Asia-Pacific growth. Once these cities' governments, intellectuals and major business leaders gained more freedom and opportunity to shape the city, forms of pragmatic coalitional leadership quickly came together. They observed the need to compete more effectively, and to sell the city's cultural attributes both to its own population to prospective visitors and investors.

Unlike other cities on different pathways to global fluency, the process for destination cities begins neither from a favorable set of government relationships and frameworks, nor a clear trade specialization. Although knowledge clusters in fields such as media have been important, they have not been decisive as they have been in the case of other kinds of globalizing cities. Instead, in the 2nd phase of global orientation, these cities seek to drive incoming traffic through rapid growth in international links, targeted urban renewal, higher education achievement and hosting major events. Cities along this path are well positioned to become leaders in niche areas of the international student economy.

Cities like Barcelona and Sydney are now in their third phase along this path, whereas others such as Cape Town are in the second phase, having had less exposure to global markets. The major obstacles to further success are how to adapt to new markets and manage the social and infrastructural costs of globalization. Their outward looking leadership structures have lobbied effectively for more integrated metropolitan planning, but there have been difficulties in effectively marketing non-tourist assets.

TAKING THE STEP AND MANAGING THE RISKS

The step phases of cities into globalization confirm a stark reality: Cities can lose traits as well as gain them. Some fail to foresee or prepare for the uncertainties and externalities associated with their exposure to a global market or supply chain. Others see their supportive government relationships erode as they become perceived to be gaining unduly, or struggle to secure an essential cycle of investment. The more cities go through cycles of globalization, the more their catalyzing traits become vulnerable.

Our findings show that cities such as Milan, Toronto, and Istanbul have all had traits eroded since they first began their global path. A city whose traits fade or even disappear risks its capacity for fluent exchange with global economic and cultural flows, which may result in many cycles of detachment and under-performance.

To begin a path to global fluency is not to say that a city will automatically reach it; at each stage new agendas must be created to maintain existing traits, attend to newly visible challenges, and develop new traits from a new vantage point. Cities that are most globally engaged must continually manage the range of externalities that global participation brings.

The spark for cities to become internationalized can vary; trade, exports, immigration, lifestyle, language, skills, even a port or an airport. Often one factor can be a decisive trigger. There are compelling stories of metropolitan success from each of the most recent waves of globalization. Neither Munich, Tel Aviv, or Brisbane were destined to become proficient in global markets, but the initiative of their leaders have achieved competitiveness and built resilience. In the forthcoming wave, city leaders should prepare intentional efforts and policies that move the region along a spectrum, from globally aware to globally oriented to globally fluent over the course of decades.

Strategies will differ depending on the economic, political, and geographic factors that distinguish regions from one another. However, all metropolitan areas share the initial step on the path to global fluency: evaluate rigorously the strengths and weaknesses that together define their global position.

In this spirit, this paper presents one potential framework for self-evaluation. Unlike some other global city analyses, it does not rank a select group of regions. Rather, it is designed to help leaders in metropolitan areas of all sizes to better understand the key traits that drive performance in the global marketplace and provide clear examples of those traits in practice at the metropolitan scale. In doing so, it endeavors to help metropolitan areas use global trade and engagement to increase jobs, build wealth, and sustain prosperity.

BROOKINGS TOOLS AND RESOURCES TO BOOST METROPOLITAN GLOBAL FLUENCY

This paper summarizes a list of 10 characteristics that contribute to a region's "global fluency." It is the latest in a line of research from the Brookings Metropolitan Policy Program that provides regional leaders with the tools and information to understand their distinct global position, including both interactive data surveys, framing papers, and resource guides.

METROPOLITAN CASE STUDIES

Case studies of 42 U.S. and international metropolitan areas are available in an online supplement to this report. Each case study documents a metropolitan area's recent global performance (measured by global indices and other data sources) and unpacks the underlying determinants of that performance. Cases are available here: <http://www.brookings.edu/research/reports/2013/06/26-global-metro-traits-mcdearman-clark-parilla>.

GUIDES AND FRAMING PAPERS

The Metropolitan Policy Program has released a series of guides and framing reports to help give metropolitan leaders the ideas and tools to boost exports and trade. These include:

- **Ten Steps to Delivering a Successful Metro Export Plan**
www.brookings.edu/research/papers/2012/08/metro-exports-guide
- **Metropolitan Trade** - www.brookings.edu/research/papers/2012/11/26-metro-trade

CATALYTIC PROJECTS

The data surveys and framing guides mentioned above are part of two broader catalytic projects aimed at helping regional leaders in the United States and abroad "go global." They are:

- The **Global Cities Initiative**, a five-year joint project of Brookings and JPMorgan Chase that aims to help leaders in U.S. metropolitan areas reorient their economies toward greater engagement in world markets. www.brookings.edu/about/projects/global-cities
- The **Metropolitan Export Initiative (MEI)**, a ground-up collaborative effort to help regional civic, business, and political leaders—with their states—create and implement customized Metropolitan Export Plans (MEPs). www.brookings.edu/metro/mei

ENDNOTES

- Chris Giles and Kate Allen, "Southeastern shift: The new leaders of global economic growth", *Financial Times*, June 4th 2013, www.ft.com/cms/s/0/b0bd38b0-ccfc-11e2-9efe-00144feab7de.html#axzz2fAbd3ZN1
- Chris Giles and Kate Allen, "Southeastern shift: The new leaders of global economic growth", *Financial Times*, June 4th 2013, www.ft.com/cms/s/0/b0bd38b0-ccfc-11e2-9efe-00144feab7de.html#axzz2fAbd3ZN1
- International Monetary Fund, Strategy, Policy, and Review Department, "Changing Patterns of Global Trade" (2011).
- "Here, There and Everywhere" *The Economist*, January 19, 2013, available at www.economist.com/news/special-report/21569572-after-decades-sending-work-across-world-companies-are-rethinking-their-offshoring.
- PwC, "Emerging markets and advanced economies" (2013), available at www.pwc.co.uk/economic-services/global-economy-watch/emerging-markets-advanced-economies-january2013.jhtml
- Ibid.
- Emilia Istrate and Carey Anne Nadeau, "Global MetroMonitor 2012: Slowdown, Recovery, and Interdependence" (Washington: Brookings Institution, 2012).
- Peter Marcuse and Ronald van Kempen, "Conclusion: A Changed Spatial Order." In Peter Marcuse and Ronald van Kempen, eds., *Globalizing Cities: A New Spatial Order?* (Malden: Blackwell, 2000): 262.
- See literature review by Chris Hamnet, "Urban Social Polarization." In Ben Derudder and others, eds., *International Handbook of Globalization and World Cities* (Cheltenham: Edward Elgar, 2012).
- Jonathan Potter, "Embedding Foreign Direct Investment" (Paris: Organization for Economic Co-operation and Development, 2003).
- Enrico Moretti, *The New Geography of Jobs* (New York: Houghton Mifflin Harcourt, 2012).
- Australian Bureau of Statistics, "Greater Sydney: People – demographics & education", (2013), available at www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/1GSYD?opendocument&navpos=220; Australian Bureau of Statistics, "Greater Melbourne: People – demographics & education", (2013), available at www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/2GMEL?opendocument&navpos=220; BBC, "Census shows rise in foreign-born", (2012), available at www.bbc.co.uk/news/uk-20677515; NYCEDC, "#36 The Foreign- and Native-born Population of NYC", (2013), available at www.nycedc.com/podcast/36-foreign-and-native-born-population-nyc; Singapore Department of Statistics, "Population in Brief 2012", (2013), available at www.singstat.gov.sg/statistics/browse_by_theme/population/statistical_tables/popinbrief2012.pdf; Statistics Canada, "Immigration and Ethnocultural Diversity in Canada", (2013), available at www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-010-x/99-010-x2011001-eng.cfm; United States Census Bureau, "State & County QuickFacts: Los Angeles County, California", available at <http://quickfacts.census.gov/qfd/states/06/06037.html>; United States Census Bureau, "State & County QuickFacts: Orange County, California", available at <http://quickfacts.census.gov/qfd/states/06/06059.html>; United States Census Bureau, "State & County QuickFacts: Miami-Dade County, Florida", available at <http://quickfacts.census.gov/qfd/states/12/12086.html>; United States Census Bureau, "State & County QuickFacts: Broward County, Florida", available at <http://quickfacts.census.gov/qfd/states/12/12011.html>; United States Census Bureau, "State & County QuickFacts: Palm Beach County, Florida", available at <http://quickfacts.census.gov/qfd/states/12/12099.html>; Douglas Todd, "Vancouver fourth for foreign-born residents. But is it 'cosmopolitan?'", *Vancouver Sun*, July 22, 2013, available at <http://blogs.vancouvernews.com/2013/07/22/vancouver-fourth-for-foreign-born-residents-but-is-it-cosmopolitan/>
- World Bank, "Data: Merchandise Trade (% of GDP)", (2013), available at <http://data.worldbank.org/indicator/TG.VAL.TOTL.GD.ZS>
- Brookings analysis of Economist Intelligence Unit data available at secure.alacra.com/cgi-bin/alacraswitchISAPI.dll?sk=fipsxc aadgxbwtrcerguezopgogotcd&app=eiusite&msg=ExecContent &topic=GetSearchOptions&datasource=countrydata.
- See Robert Guest, *Borderless Economics* (Palgrave Macmillan, 2011); and Vivek Wadhwa, AnnaLee Saxenian, and F. Daniel Siciliano, "Then and Now: America's New Immigrant Entrepreneurs, Part VII" (Kansas City: Ewing Marion Kauffman Foundation, 2012).
- Richard Dobbs and others, "Urban world: Mapping the economic power of cities", (2011), McKinsey Global Institute, available at www.mckinsey.com/insights/urbanization/urban_world
- Sri Lanka Department of National Planning and the Ministry of Finance and Planning, "Sri Lanka: The Emerging Wonder of Asia, (2010), available at www.treasury.gov.lk/publications/mahindaChintanaVision-2010full-eng.pdf
- See generally, Saskia Sassen, *The Global City: New York, London, Tokyo* (Princeton: Princeton University Press, 1991); Saskia Sassen, *Cities in a World Economy* (Thousand Oaks: Pine Forge Press, 2012); Peter J. Taylor, *Global Urban Analysis: A Survey of Cities in Globalization* (London: Earthscan, 2011); Derudder and others, *International Handbook: Marcuse and van Kempen, Globalizing Cities*; Mario Polèse, *The Wealth and Poverty of Regions: Why Cities Matter* (University of Chicago Press, 2009); Edward Glaeser, *Triumph of the City* (Penguin Press, 2011).

19. Reviewed rankings and indices include: Globalisation and World Cities Network, "The World According to GaWC, 2010," available at www.lboro.ac.uk/gawc/world2010t.html. fDi, "Cities of the Future" series, available at www.fdiintelligence.com/Rankings. Tholon's, "Top 100 Outsourcing Destinations 2012," available at top100.tholons.com/2012top100outsourcingdestinations.aspx. KPMG and Greater Paris Investment Agency, "Global Cities Investment Monitor 2012," available at: www.kpmg.com/FR/fr/IssuesAndInsights/News/Documents/GPIA-KPMG-CIM-2012.pdf. Z/Yen Group, "The Global Financial Centres Index 12," available at www.zyen.com/images/GFCI_25March2013.pdf. Economist Intelligence Unit, "Hot Spots: Benchmarking Global City Competitiveness," available at www.citigroup.com/citi/citiforcities/pdfs/hotspots.pdf. A.T. Kearney and Chicago Council on Global Affairs, "2012 Global Cities Index," available at www.atkearney.com/gbpc/global-cities-index/full-report/-/asset_publisher/yA110gZpc1DO/content/2012-global-cities-index/10192. PwC, "Cities of Opportunity," available at, www.pwc.com/us/en/cities-of-opportunity/index.jhtml. Institute for Urban Strategies, The Mori Memorial Foundation, "Global Power City Index, 2011," available at www.mori-m-foundation.or.jp/english/research/project/6/pdf/GPCI2011_English.pdf. Eurobarometer and TNS Qual+, "Migrant Integration," available at http://ec.europa.eu/public_opinion/archives/quali/ql_5969_migrant_en.pdf. 2thinknow, "Innovation Cities Index," available at www.2thinknow.com/information/innovation-programs/innovation-cities/. *Euromonitor*, "Top 100 Cities Destination Ranking," available at www.blog.euromonitor.com/2013/01/top-100-cities-destination-ranking.html. Yuwa Hedrick-Hong, "MasterCard Global Destination Cities Index" (MasterCard Worldwide). Simon Anholt and GfK Roper, "The Anholt-GfK Roper City Brands Index," available at www.gfkamerica.com/practice_areas/roper_pam/placebranding/cbi/index.en.html.
20. Emilia Istrate, Bruce Katz, and Jonathan Rothwell, "Export Nation: How U.S. Metros Lead Export Growth and Boost Competitiveness" (Washington: Brookings Institution, 2010).
21. Polèse, *The Wealth and Poverty of Regions*.
22. Zachary Neal, "Differentiating Centrality and Power in the World City Network", *Urban Studies* 48 (2011), 2733-2748
23. Paul Anisef and Michael Lanphier, *The World in a City* (Toronto: University of Toronto Press, 2003).
24. Julie-Anne Boudreau and others, "Comparing Metropolitan Governance: The Cases of Montreal and Toronto," *Progress in Planning* 66 (2006): 7-59.
25. Betsy Donald, "Spinning Toronto's Golden Age: The Making of a 'City That Worked,'" *Environment and Planning A* 34 (2002): 2127-2154
26. Mario Polèse, "Five Principles of Urban Economics," *City Journal*, 23 (2) (2013).
27. *ibid.*
28. Rakesh Basant, "Bangalore Cluster: Evolution, Growth, Challenges", in Professor Shahid Yusuf, Kaoru Nabeshima (eds), "Growing Industrial Clusters in Asia: Serendipity and Science", (Washington DC: World Bank, 2008), pp.147-93
29. Balaji Parthasarathy and Yuko Aoyama, "From software services to R&D services: local entrepreneurship in the software industry in Bangalore, India", *Environment and Planning A*, Vol.38, (2006), pp.1266-1285
30. *ibid.*
31. Sassen, *The Global City*.
32. John Foot, *Milan Since the Miracle: City, Culture, and Identity* (Oxford: Oxford International Publishers, 2001).
33. Edward L. Glaeser, "Unleash the Entrepreneurs," *City Journal*, 21(4) (2011). Recent restructuring of Detroit's auto industry suggests the regional economy is taking a turn for the better. See Drake Bennett, "GM, Ford, and Chrysler: The Detroit Three Are Back, Right?" *Bloomberg Businessweek*, April 4, 2013, available at <http://www.businessweek.com/articles/2013-04-04/gm-ford-and-chrysler-the-detroit-three-are-back-right>.
34. Cjw-L Wee, "The End Of Disciplinary Modernisation? The Asian Economic Crisis and the Ongoing Reinvention of Singapore," *Third World Quarterly*, 22 (6) (2003): 987-1002.
35. Aaron Koh, *Tactical Globalization* (New York: Peter Lang, 2010).
36. Marystella Amaldas, "The Management of Globalization in Singapore: Twentieth Century Lessons for the Early Decades of the New Century," *Journal of Alternative Perspectives in the Social Sciences*, 1 (3) (2009): 982-1002.
37. George Washington Institute of Public Policy and RW Ventures, "Implementing Regionalism: Connecting Emerging Theory and Practice to Inform Economic Development" (Washington: George Washington University, 2011).
38. British Council, "OPENCities: Leadership and Governance of OPENCities", (2010), available at www.opencities.eu/web/download/leadership_and_governance.pdf.
39. Sanchia Berg, "How can schools nationwide mimic London's improvement?", BBC Online, February 21st 2013, available at www.bbc.co.uk/news/education-21534863
40. Morretti, *The New Geography of Jobs*.
41. Elaine Yau, "As more residents leave Hong Kong, experts worry about a brain drain," South China Morning Post, September 2nd 2013, available at www.scmp.com/lifestyle/family-education/article/1300687/more-residents-leave-hong-kong-experts-worry-about-brain; Jonathan Earle, "Guriyev Exit Renews Brain Drain Fears", *The Moscow Times*, 31st May 2013, available at www.themoscowtimes.com/news/article/guriyev-exit-renews-brain-drain-fears/480881.html

42. Ibid.
43. Lant Pritchett, *Let Their People Come: Breaking the Gridlock on Global Labor Mobility* (Washington, DC: Center For Global Development, 2006).
44. George Washington Institute of Public Policy and RW Ventures, "Implementing Regionalism."
45. Paris-Region Economic Development Agency, "High Performance Sectors", (2011), available at www.paris-region.com/ard/paris-region-economic-developpement-agency/paris-region-s-economy/competitiveness-clusters/; QS, "Best Student Cities", (2012), available at www.topuniversities.com/best-student-cities
46. Asaf Shtull-Trauring, "21st Century Israel More Educated, Tech Savvy, Survey Says," *Haaretz*, May 5, 2010, available at www.haaretz.com/print-edition/news/21st-century-israel-more-educated-tech-savvy-survey-says-1.288284.
47. Baruch A. Kipnis, "Tel Aviv, Israel - A World City in Evolution: Urban Development At a Dead End of the Global Economy," *Dela* 21 (2004): 183-193.
48. Gila Menahem "Jews, Arabs, Russians and Foreigners in an Israeli City: Ethnic Divisions and the Restructuring Economy of Tel Aviv 1983-96," *International Journal of Urban and Regional Research* 24 (3) (2000): 634-652.
49. "Tel Aviv Global City" (Tel Aviv-Yafo Municipality, 2012), available at www.telaviv.gov.il/english/GlobalCity.htm.
50. Ben Rooney, "How Tel Aviv Became a Tech Hub," *Wall Street Journal*, January 27 2012, available at blogs.wsj.com/tech-europe/2012/01/27/how-tel-aviv-became-a-tech-hub/.
51. British Council, "Internationalisation in OPEN Cities", (2010), available at www.opencities.eu/web/download/internatocs.pdf
52. Jan Nijman, *Miami: Mistress of the Americas* (Philadelphia: University of Pennsylvania Press, 2011).
53. Yeong-Hyun Kim, "Keeping the Gateway Shut: Regulating Global City-ness in Seoul." In Marie Price and Lisa Benton-Short, eds., *Migrants to the Metropolis: The Rise of Immigrant Gateway Cities* (Syracuse: Syracuse University Press, 2008).
54. Ian Gordon, Tony Travers and Christine Whitehead, "The Impact of Recent Immigration on the London Economy", (2007), LSE
55. Peter Earle (2001), 'The economy of London, 1660-1730', in Patrick O'Brien (ed), *Urban Achievement in Early Modern Europe*, Cambridge: Cambridge University Press, pp.81-97
56. Financial Times (2009), 'London cooling', <http://www.ft.com/cms/s/0/5ca63494-f8a7-11dd-aae8-000077b07658.html>
57. GLA (2009), 'London hit four times harder than rest of UK by Government's plans to tax high earners', http://www.london.gov.uk/view_press_release.jsp?releaseid=21840
58. Ibid.
59. Ibid.
60. Franklin J. James, Jeff A. Romine, and Peter E. Zwanig, "The Effects of Immigration on Urban Communities," *Cityscape* 3 (3) (1998): 171-192.
61. George Washington Institute of Public Policy and RW Ventures, "Implementing Regionalism."
62. McKinsey Global Institute, "Infrastructure productivity: How to save \$1 trillion a year", (2013), www.mckinsey.com/insights/engineering_construction/infrastructure_productivity
63. World Business Chicago, "A Plan for Economic Growth and Jobs" (2012).
64. John Schwartz, "Freight Train Late? Blame Chicago," *New York Times*, May 7, 2012, available at www.nytimes.com/2012/05/08/us/chicago-train-congestion-slows-whole-country.html?pagewanted=all.
65. Adie Tomer, Robert Puentes, and Zachary Neal, "Appendix B: International Air Travel between the United States, by U.S. Metropolitan Area, 2003 and 2011" (Washington: Brookings, 2012), available at www.brookings.edu/~media/research/files/reports/2012/10/25%20global%20aviation/25%20global%20aviation%20appendix%20b.
66. Istrate and Marchio, "Export Nation 2012."
67. Rosemarie Andolino, "Investing in Airports During Tough Economic Times; Chicago Leads the Way" (Aero Club of Washington, July 25, 2012), available at www.ohare.com/PressRoom/speeches/aero_club_washington.pdf.
68. Hall and others, "The Geography of Immigrant Skills."
69. Adie Tomer and others, "Missed Opportunity: Transit and Jobs in Metropolitan America" (Washington: Brookings Institution, 2011).
70. Elizabeth Kneebone, "Job Sprawl Stalls: The Great Recession and Metropolitan Employment Location" (Washington: Brookings Institution, 2013).
71. China Today, "Nanjing Software: The New Brilliance of an Ancient City", (2009), www.chinatoday.com.cn/english/china/2009-08/20/content_434401_2.htm
72. Susan Lund and others, "Financial Globalization: Retreat or Reset?" (San Francisco: McKinsey Global Institute, 2012).
73. Darrell M. West and others, "Rebuilding America: The Role of Foreign Capital and Global Public Investors" (Washington: Brookings Institution, 2011).
74. See Brisbane Marketing, "Infrastructure: Fact sheet" (2011), available at www.investbrisbane.com.au/pages/Industry%20sectors/~media/Corporate/Documents/Invest/Invest%20Fact%20Sheets/Infrastructure-Fact-Sheet.ashx.
75. S. Jones, "Can Australian Local Governments Have a Role in Local Economic Development? Three Cases of Evidence," *Urban Policy and Research*, 26 (1) (2008): 23-38.

76. Rowland Atkinson and Hazel Easthope, "The Consequences of the Creative Class: The Pursuit of Creativity Strategies in Australia's Cities," *International Journal of Urban and Regional Research*, 33 (1) (2009): 64-79.
77. McDearman and Liu, "10 Steps."
78. Ibid.
79. Jeffrey S. Gaab, *Munich: Hofbräuhaus and History: Beer, Culture, and Politics* (New York: Peter Lang, 2000); Mia Lee, "The Gruppe Spur." In Timothy Brown and Lorena Anton, eds., *Between the Avant-Garde and the Everyday* (Oxford: Berghahn Books, 2011).
80. Frank Hendriks, *Public Policy and Political Institutions* (Cheltenham: Edward Elgar, 1999).
81. Philipp Rode and others, "LSE Cities Next Urban Economy Series: Munich Metropolitan Region Staying Ahead on Innovation." Conference Paper, December 2010, available at http://aws1.cloud.globalmetrosareasummit.net/media/nue/2010_NUE_Munich_gmm.pdf.
82. Donald McNeill, "Mapping the European Urban Left: The Barcelona Experience," *Antipode*, 35 (1) (2003): 74-94.
83. Joaquim Llimona, "Barcelona: A Bid Toward Internationalization" (2012), available at www2.lse.ac.uk/europeanInstitute/research/catalanObservatory/documents/pdf/Crisi-and-Local-Gvt/Presentacio-LSE---JLlimona.pdf.
84. Kevin H O'Rourke and Jeffrey G Williamson, "After Columbus: Explaining the Global Trade Boom, 1500-1800," (2001), National Bureau of Economic Research Working Paper 8186, www.nber.org/papers/w8186.pdf; Andre Gunder Frank, *ReOrient: Global Economy in the Asian Age*, (Berkeley: University of California Press, 1998).
85. Ferdinand Braudel, *Civilization and Capitalism, 15th-18th Century: The perspective of the world*, (Berkeley: University of California Press, 1992); Ronald Findlay and Kevin H. O'Rourke, *Power and Plenty: Trade, War, and the World Economy in the Second Millennium*, (Princeton: Princeton University Press, 2007); WTO, "World Trade Report 2008: Globalization and Trade", (2008), www.wto.org/english/res_e/booksp_e/anrep_e/wtr08-2b_e.pdf; WTO, "World Trade Report 2013" (2013), www.wto.org/english/res_e/booksp_e/world_trade_report13_e.pdf
86. Nordregio, "The Three Waves of Globalisation", (2013), available at www.nordregio.se/en/Metameny/About-Nordregio/Journal-of-Nordregio/2008/Journal-of-Nordregio-no-1-2008/The-Three-Waves-of-Globalisation/

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