1. Introduction

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Many mature industrial economies (MEIs) have not been treated well by the changes that have transformed the global economy during the past 30 years. Changes in technology have rendered many traditional locations non-competitive, the rise of emerging markets has posed a direct challenge to the vitality of these MEIs, and both capital and labor have moved to more congenial places of employment.¹ Since many states or provinces are composed of urban centers, towns of a variety of sizes, and agricultural spaces, some of which have survived these changes without much negative impact, we will focus our attention on the cities and towns that have been the heart of the industrial sector over the past century or two.

While it is true that researchers have found that some MEIs retain an endowment of assets that gives them advantages in the adoption of new technology-intensive production,² the experience of many others, if not most, has been one of a loss of competitiveness of their major economic entities, a decline in ‘good jobs’ employment, the migration of young, skilled and ambitious workers to more dynamic cities or even countries, declining tax revenues to support infrastructure maintenance and expansion as well as social services, and marginalization. The result is that these cities are characterized by: aging populations, deteriorating physical structures – be it residential, industrial or urban amenity – a loss of collective spirit and hope, and secular decline. The contributors to this book are of the opinion that it is possible for the overwhelming majority of MEIs to chart courses for their future development that will bring them much of the objectives their residents would choose for their city. It is in this spirit that we offer the elements of an economic strategy for a mature industrial economy.

ECONOMIC CHARACTERISTICS OF THE MEI

The debate about the fate of MEIs has been a feature of the discourse about urban areas for the past two decades. Much of the concern about

their future was captured in the hearings of the US Senate Committee on Banking, Housing and Urban Affairs (1993) when senators, cabinet secretaries and other experts gave voice to the litany of failures and weaknesses of American cities at that time. Randall Bartlett captured this negative view of the future of US MEIs with his listing of their problems: (1) high crime rates, (2) high rates of poverty, (3) persistent unemployment and mediocre jobs, (4) deteriorating public services, and (5) geographic and social isolation (Bartlett, 1998, ch. 1). This was just over two decades after many of the MEIs experienced urban riots and after some of them were driven to or close to bankruptcy. At about this time I was in Minneapolis and listened to a radio discussion about the situation in that city. The concept being discussed was the ‘hole in the doughnut’. Specifically, it was argued that if the per capita income in the center of the city fell to below 60 per cent of that of the ring around it, the city was in danger of a free fall into social pathologies and economic deterioration; the speaker felt that Minneapolis was heading in this direction. Such was the concern about US cities at that time.

More recently urban specialists have discussed the notion of the ‘resurgent city’, that is, a city that rises out of this deteriorated state into a new era of recovery, prosperity, and economic relevance. Allan Scott (2008, p. 549) sees globalization as ‘helping to encourage the growth and spread of cities throughout the world’. Thus, much of his resurgence is taking place in Mumbai, Shanghai, Seoul and other cities in emerging economies, and when he examines this resurgence, presumably in MEIs as well, he finds an ‘escalating contrast between its surface glitter and its underlying squalor’. So the resurgence tends to be captured by upper-tier workers rather than by society as a whole. Not a pretty picture.

A cautionary note with regard to the resurgent city is given by Storper and Manville (2006, p. 1269) who suggest that we should not ‘see in every downturn a crisis and in every upturn a renaissance’. They urge us to differentiate between the metropolitan area or urban region and the central city itself. ‘The revitalized central city needs not just a growing region but also some shift within that region that moves people towards city life.’ City life is generally contrasted with rural or suburban life in its richness in ‘urban amenities’ such as museums, theaters, concert halls, high-scale shopping, restaurants, and major sports facilities – all in close proximity.

One of the major MEIs in the United States that has experienced the negative consequences of economic change is the Commonwealth of Pennsylvania. When Governor Ed Rendell took up his office seven years ago he immediately established the development of the economy of the Commonwealth of Pennsylvania as one of his highest priorities. One of the primary industrial states of the US until the OPEC oil price crisis

of the 1970s, Pennsylvania became one of the most negatively affected economies in the Industrial Heartland – shortly thereafter the Rust Belt. Manufacturing jobs and young people with industrial skills continued to flow into other more expansionary regions of the US – the South and the West, of course, but also to other cities that were perceived to have more to offer. The same was true at the other end of the workforce. The Wharton School of Business of the University of Pennsylvania did a study several years ago and discovered that while over 65 per cent of MBA graduates of the Harvard Business School wanted to find employment in the Boston area, the percentage figures for Wharton and Philadelphia were in the mid-30s. Clearly there was something about the Pennsylvania economy that was not attractive either to young or to highly educated workers. Something had to be done.

In 2003 the Brookings Institution was commissioned to conduct a study of the Pennsylvania economy. They focused on 16 urban regions in Pennsylvania and noted, among other things, that the 16 urban regions accounted for 84 per cent of the Commonwealth's population and produced 92.3 per cent of its output. Unfortunately, they also argued, the Commonwealth had for decades overinvested in rural areas and deprived the urban areas of the funds they needed to become competitive in the modern economy. As a consequence of the structure of their study, the rural and agricultural areas of the Commonwealth were not studied. Two years later a second study was commissioned, this time from IBM Consulting Services (2005). This study accepted the notion that clusters are central to regional competitiveness and focused on 11 geographic regions and their strength in four industrial clusters: life sciences, high technology, advanced manufacturing and materials, and business services. While also a very useful study, IBM Consulting Services conceived of the Commonwealth as geographic in its make-up. In the Central region we find State College, Williamsport, Lock Haven, Lewisburg and Bloomsburg – cities for which there is no discernable commonality. What makes this a region other than geography?

It was in this context that the Global Urban Competitiveness Project (GUCP) proposed to the Department of Community and Economic Development that a third study be undertaken – not a better study but rather one that would have a different and distinctive basis to it. The Department accepted this proposal, and the presentations of that research seminar that are printed here are the realization of this initiative. The GUCP is an association of a dozen urban specialists from China, Korea, Mexico, the US, Canada, the UK and Italy.³ It was proposed that this group should bring its collective understanding of the situation of cities and towns in various parts of the world economy to bear on a set of specific,

major problems for the future development of Pennsylvania's cities and towns. While the initial focus was on the economy of Pennsylvania, the issues dealt with and the strategic responses that the GUCP brought to the discussion have relevance to the economic plight of MEIs in all parts of the industrialized world. Therefore, the focus of this book is far more extensive in its application than was the initial research seminar.

Data for 75 US Metropolitan Statistical Areas show that MEIs are 20 of the 26 urban areas with the slowest population growth, 15 of the 20 with the highest percentage of residents aged 65 and older, 14 of the 20 with the highest percentage of employment in manufacturing, half of the 20 with the lowest share of employment in professional, scientific and technical (PST) services, and 17 of the middle 30 with the highest percentage of residents with below poverty level incomes. To be sure many MEIs do not fit this pattern – New York and Baltimore have low employment in manufacturing and, along with Detroit, Bridgeport and Boston, high employment in the PST services; Boston, Baltimore and Minneapolis have low rates of poverty, and Washington, Minneapolis and Columbus have younger populations (Gaquin and DeBrandt, 2007). But for most, this pattern holds.

Pennsylvania, the initial focus of our research seminar, is a populous, slowly growing state with a population that is one of the oldest in the US. The fact that so many of its residents are seniors contributes to the low level of below poverty level individuals, since seniors receive Social Security and many also receive work-related retirement benefits. The Commonwealth is in the middle of US states in household income, the percentage of its population that is African-American and college educated. It has a high number of immigrants, but is below the average of US states when it comes to Hispanic residents and of residents with high school education.

The last decade has been hard on Pennsylvania's manufacturing employment, with 20 per cent fewer jobs in 2007 than in 1997 (Table 1.1). Gains in productivity have resulted in a continuing increase in manufacturing value added and output. In fact, during the recovery from the deindustrialization period following the OPEC petroleum price hikes, during 1986–2000 manufacturing output rose by almost 65 per cent while employment fell by over 10 per cent. Clearly important structural changes were taking place, both within manufacturing and within the workforce.

Pennsylvania has three large Metropolitan Statistical Areas, Philadelphia, Pittsburgh and Allentown-Bethlehem-Easton (A-B-E). Table 1.2 shows how different the three are. Philadelphia has a better educated population with fewer people aged 65 and older than the two other cities. Pittsburgh has less racial diversity, while A-B-E has a large population below the

Table 1.1 Pennsylvania manufacturing employment

1997	826 521
2002	715 453
2007	657 800
2007–1997	–168 721
2007/1997	0.796

Source: *Census of the United States*, Washington: Department of Commerce, various issues.

Table 1.2 Pennsylvania's three largest MSAs are ranked (out of 75 US MSAs)

	Philadelphia	Pittsburgh	Allentown- Bethlehem- Easton
Percentage 65 and older	18	3	6
Population change 2000–2005	60	74	29
Percentage White	37	1	6
Percentage college graduates	25	54	67
Median household income	21	25	65
Percentage of population below poverty level	40	43	73
Manufacturing employment/ total empl.	49	38	20
Empl. PST services/total empl.	13	29	70

Source: Gaquin and DeBrandt (2007).

poverty level, but it is growing more rapidly. Philadelphia is the least reliant on manufacturing and the most on professional–scientific–technical (PST) employment while the reverse is true for A-B-E.

As the above data indicates, Pennsylvania is not the most robust state economy of the United States. During the quarter century of the post-WWII period the Pennsylvania economy was doing deceptively well. However, lack of investment in new technologies in traditional industries such as steel making was slowly eroding the competitiveness of its manufacturing industry. A variety of programs such as mortgage deductibility and the expansion of the highway transportation system undermined the vitality of large cities such as Philadelphia and Pittsburgh, inducing first residents and then jobs to migrate to suburbs and outlying areas.

Coal declined as a provider of jobs and local revenues and many of these regions found that their major export item had shifted from coal to young people. The *coup de grâce* for much of Pennsylvania's traditional economic strength was the increase in oil prices in 1973 and 1979 that turned the 'industrial heartland' into the 'rust belt'. The collapse of the steel industry in Pittsburgh, Bethlehem and elsewhere occurred fairly rapidly. In Pittsburgh the Homestead Steel Works of US Steel, that had produced more steel during WWII than all of the steel works in Germany plus all of those in Japan, finally closed its doors in 1986. The slow evolution from mighty steel works to derelict mills to shopping malls or vacant contaminated fields began. In finance, bank mergers, the rise of Charlotte, North Carolina as a financial center and the concentration of much of the high-level activity in New York reduced the status of both Philadelphia and Pittsburgh. Furthermore, when Pittsburgh lost Mellon Bank through a merger with the Bank of New York, employment in Pittsburgh increased but the jobs lost were high level managerial jobs and those gained were lower level back-office jobs.

One of the striking consequences of this economic evolution has been the inability of Pennsylvania to retain the thousands of graduates every year from its more than 150 colleges and universities. In addition to the working class young leaving declining coal towns, Pennsylvania has been losing its educated young workers. The Wharton Business School of the University of Pennsylvania referred to above was both a description of an existing situation as well as a clear warning signal with regard to the future of the city.

Recently, however, there have been signs of a reversal of Pennsylvania's fortunes. Philadelphia has emphasized in its economic strategy 'eds' and 'meds', that is, institutions of higher learning and research, and medical technology and health care. In Pittsburgh its two universities have focused their activities on two distinct sectors: Carnegie Mellon University has concentrated on robotics and computer science, and the University of Pittsburgh is gaining recognition as a center for medical technology and health care. There is some evidence that each of these two major cities has been successful in making itself more attractive to highly educated and skilled workers. The same is true of many smaller cities.

The story of Pennsylvania, both its decline during the last quarter of the 20th century and the recovery of some of its major cities, is duplicated in many other MEIs. Each has its own story but each has also been negatively buffeted by the same systemic forces of change.

POLICY OPTIONS FOR MEIs

From this we can see that some of the problems that confront the cities and towns of MEIs include:

- Retention of young workers and college/university graduates.
- Bringing economic vitality to many smaller towns in slow growing or declining regions.
- Introducing effective governance structures so as to mobilize more effectively local resources and talent.
- Refocusing the economic strategic thinking in major cities, as well as other cities and towns toward strategies that will be forward looking and will provide the residents of these cities with the lives they aspire to live.
- All US cities face the challenges of social exclusion, aging and economic deprivation and the challenges for some Pennsylvania cities and towns are more formidable than is the case elsewhere.
- In the current globalized economy all cities must attend to their competitiveness in relation to other cities in which they are in competition for jobs, plant and activity location.
- Technology is in a constant state of advancement and MEIs must continue to show that they have been participating in this exciting world of technology and finding practical employment in the latest technological advances.

Much of this confronts cities and towns everywhere, but Pennsylvania's economic history, its demographic and economic structures, and recent developments that are specific to it make it clear that the Commonwealth and other MEIs must chart their own individual course, one that is based on existing assets, additional assets that it is realistic to think can be put into place, and the aspirations of the residents of these MEI cities. This point is supported by Markusen and Schrock who wrote of the futility of

try(ing) to match the competition elsewhere in terms of business climate (for example, tax, regulatory structure), subsidies to attract or retain business, or the provision of comparable land or infrastructure. This often-mindless groping for 'best practice' can be attributed in part to . . . the proliferation of economic development consultancies. (2006, p. 1319)

For them the best approach is that of playing to the city's strengths and developing new ones. One important aspect of this is to recognize a dynamic in which skilled workers go to the places with the multiple amenities they find congenial and then firms feel compelled to move there

because that is where the workers are. 'Becoming more distinctive may be a survival strategy for an older industrial city. It may not increase overall employment, but it might countervail losses in uncompetitive functions.' Turok (2009, p. 27) endorses this approach and argues that: 'Cities need to develop capabilities for dynamic change that enable steady improvements over time through original analysis, creative thinking, enterprise, initiative, learning, and innovation. They also have to start from their existing position and inherited resources rather than some abstract high-end ideal.'

A rather similar conclusion is reached by Glaeser and Gottlieb (2006) whose research indicated that: 'The success and failure of big cities depends in large part on the urban edge in consumption, not production. Urban decline in the post-war period was caused in large part by changes in technology that made big cities less effective at catering to consumers' preferences' (p. 1297). The key elements in the subsequent resurgence has been declining crime rates and 'rising incomes and education levels which increase demand for urban amenities like museums, restaurants and concerts'. All of these are assets that are uniquely specific to an individual urban area.

Much of recent research on the resurgent city or MEI stresses this need to avoid the 'flavor of the day' and to develop assets that are indigenous to the MEI. There is no single approach or strategy that will work for all MEIs and there is a powerful need for a ground up development of a strategic response to economic distress or decline that is grounded in research done on the local economy, governance and society. The research seminar on Pennsylvania's cities and towns gave the urban specialists of the Global Urban Competitiveness Project the opportunity to bring their knowledge and experience from many countries and cities to bear on these issues of public policy. Specifically, we focused on the following eleven possible economic strategies that we believe should be considered by municipal leaders in MEIs in Pennsylvania and throughout the industrialized world.

1. Higher Education/Community Partnerships

One of the principal assets of mature industrial economies (MEIs) is their rich endowment of universities and colleges. These higher educational institutions (HEIs) are ubiquitous in their location. Typically the largest universities are located in the MEIs, but smaller often excellent universities and colleges are situated in rural towns of little more than 10 000 inhabitants. In Chapter 2, David Maurrasse informs us that these 'anchored' institutions can form the basis of a local economy that is globally competitive. The key aspect of the relationship between an HEI and the community in

which it is located is the creation of an effective ‘multi-stakeholder, cross-sector’ partnership. This means that the HEI is linked to entities in government, the business community and civil society. This is not an easy thing to initiate and even less easy to maintain in the long run. Maurrasse tells us that direct involvement of the leadership of these institutions is crucial, as is making explicit the mutual benefit that is available for all of the partners. HEIs are characterized by their unique combination of intellectual or knowledge capital, human capital and social capital. The fact that this capital is lodged in an institution that in most cases has been situated in a community for over a century, and is almost guaranteed never to relocate, makes HEIs powerful engines of economic growth. In effect the destinies of the HEI and its community are inexorably intertwined.

The relationships between HEIs and communities have not always been as mutually supportive and positive as Maurrasse argues it can be. Often the HEI and its faculty are focused on teaching and research activities that have little to do with the needs and reality of the local community. However, he argues that in all HEIs there are some faculty, programs/departments and administrators who do find inspiration and satisfaction in work that is tied to the community. Here he finds the kernel of mutual benefit that will create and sustain an effective HEI–community partnership. One such example he found in the University of Pennsylvania and its Anchor Institutions Toolkit for developing effective HEI–community partnerships, and this university’s efforts to improve both its relations with, and the economic vitality of, the surrounding community in Philadelphia.

Maurrasse believes that MEIs in the US and other countries can become important laboratories for HEI–community partnership development. Our many HEIs that are located in cities and towns that range from the very competitive and successful centers of health care, consumer services and niche manufacturing to the de-industrialized, declining and abandoned can be mobilized as agents for town revitalization and competitiveness enhancement. The quality of the local environment is an important element in the success of the HEI, so there is a mutually beneficial result of a successful partnership that should be sufficient to mobilize the local resources and talents of all of these communities. Finally, it is argued that this is a propitious time for action since there is now in Washington a new administration that is interested in enlisting a wide array of federal agencies, in addition to the Department of Housing and Urban Development, in the effort to revitalize communities of all sizes.

The analysis of Maurrasse should give inspiration and hope to community leaders in all of the cities and towns in the Commonwealth that host one of the most powerful agents of economic change – one or more universities and colleges.

2. Technological and Cultural Clusters Strategy

It is typical for those who are involved in urban and regional economic development to speak glowingly about the potential for industrial clusters. While we have known about the potential benefits of clusters since Alfred Marshall wrote about them in the 19th century, in practice their impact is often somewhat short of what is promised. In actuality, clusters are organic, living structures that need certain conditions for their flourishing. Some industries are fundamentally uncongenial to them since the local firms are linked only to the parent firm, perhaps hundreds of miles distant, and they have no contact with other firms in the 'cluster'. In some other industries, local firms share a common asset, such as a pool of skilled workers, and have frequent contact with each other. In these latter situations we find true clusters, with all of the benefits of sharing tacit knowledge, common branding and marketing, and formation of working alliances and relationships. How many of the industrial 'clusters' identified in the IBM Consulting Services (2005) study of the Pennsylvania economy are true clusters, in actuality or in potentiality?

Diane-Gabrielle Tremblay examines in Chapter 3 how a strategy of technological and cultural clusters has been implemented and worked in Montreal. The predominant position of this city in the knowledge and innovation sectors of economic activity has its roots in the late 1980s when the provincial government introduced strategic policies to generate a 'technological turning' for its economic activity. This has manifested itself in the expansion of research and production in information-technology and multimedia activity. Today the city has strengths in multi-media, and in film and audiovisual production. In her examination of these clusters, Tremblay emphasizes the importance of consistency in a strategic policy thrust over decades, of supportive intervention by the state at crucial initial periods of development, of 'creating a sense of identity for the industry' and of branding the complex as being linked with the city of Montreal. This is needed for the mobilizing and bringing together of the creative individuals and private investors, and establishing links with the world outside of Montreal.

In many MEIs, the largest metropolitan areas have been developing economic strengths based on the cultural sector, both as a creative activity and in the sense of performance and display that will enhance their competitiveness. For development of clusters in design, fashion, film and audiovisual, video games and so forth, universities, colleges and schools of art are a necessary component of a successful strategic thrust. This suggests that there are many cities and towns, other than just the largest cities, that can be successful in creating clusters in the creative and innovative

sectors of economic activity. The experience of Montreal, as detailed by Tremblay, should give inspiration and guidance to local leaders in these municipalities.

3. The Knowledge Base

Given the richness of the endowment of MEIs in institutions of higher learning and research, their cities and towns should have an advantage in developing economies based on the knowledge base and research and innovation. It is true that many MEIs have had difficulty in retaining their university graduates, but this just makes the challenge to local leaders all the clearer. Tax policies, public investment and public sector intervention may work on the supply of factors and on aggregate demand, but knowledge workers seek out congenial environments. These environments include factors such as education, quality of life, information infrastructure, airport connectivity, and access. In Chapter 4, William Lever sees Scotland as a typical MEI and he shows what has been done there to develop knowledge sector clusters and an economy based on research and development, and on knowledge spillovers. He notes that both Scotland and, among other MEIs, Pennsylvania have suffered from low population growth, an aging population, industrial decline and two major metropolitan areas – but also a disproportionate endowment of institutions of higher learning and technology. After decades of decline, now Scotland is experiencing a renaissance of its major urban economies; surely there are lessons here for other MEIs.

Using results from the Master Card World Centers of Commerce database, Lever shows that Philadelphia is ranked 18 of 63 cities throughout the world with regard to its knowledge base and has comparative strength in its medical schools. This is in line with the approach of Philadelphia's city planners of focusing on 'eds and meds', that is, on educational institutions and on medical technology and research. Scotland's policy approach has been to focus on biotechnology and creative media. The success of this focus gives guidance to Pennsylvania's municipal leaders with regard to developing university-based technology clusters and to introducing policies to attract and retain an educated knowledge sector workforce. Lever also shows how local authorities can take charge of their own economic development when the higher levels of government may be engaged in activities that have little to do with local development.

4. Government and Governance

Governance entails the coordination and mobilization of the human resources of an urban region – its people and its institutions – toward the

objective of managing and directing the affairs in strategic planning and implementation. Thus governance goes far beyond just the activities of government, and includes the significant institutions of both the public and the private sectors: the firms that produce goods and services, the chamber of commerce, institutions of higher learning, skill development entities, labor unions, social organizations, citizens' committees, and so forth. However, in this world of globalization, restructuring, transition from manufacturing to services, development of local competences and branding it is clear that effective governance is a necessary condition of urban economic development. Effective governance is often an elusive goal in an environment of competing visions, sources of power, diffuse authority, little assessment of performance, and no consequences for failure. Sadly, it is utterly lacking in many of the industrialized countries as well as most of the countries of the Third World.

In Pennsylvania, some have memories of the effectiveness of the direction of some mayors or regional economic development entities. Decades ago when Allegheny County encompassed the municipalities and economic region of greater Pittsburgh, a strong Allegheny County Commissioner was able to accomplish the tasks of effective governance. Today, the regional economy extends beyond the county and many of the component municipalities and planning agencies have their own vision, plan and aspirations. Today most urban regions are like this, and effective governance has arisen as one of the principal challenges to our cities and towns. There are also many other examples of communities in which structures and relationships of effective governance are being put in place.

In Chapter 5, Stefano Mollica, Marco Lucchini and Giovanna Hirsch, uses the experiences of three cities in Italy to offer guidance to those who are charged with developing effective governance in the Commonwealth. Part of the story of these Italian cities is changes in the public administration system of the country. Laws and structures were changed to transfer responsibility and autonomy to local governments, improvement of mechanisms of citizen participation, and separation of the roles of politicians and managers. The other part of the story is actions taken in each of the three cities: Matera, Barletta and Pesaro. From these three examples Mollica et al. derive a set of nine conditions of effective governance.

There is much in the story of these diversely challenged cities that will give guidance to local authorities in MEIs elsewhere.

5. Economic Structure and Business Organization

Jaime Sobrino in Chapter 6 relates developments in the economic and business activity of Mexico City to its demographic changes since 1980.

While the demographic changes in Mexico City do not parallel those of Pennsylvania, the similarities are important enough to make the experience of that city relevant to the situation of our cities and towns. Many MEIs have either lost population during the past 20 years or it has grown far more slowly than that of the nation or other major cities. Mexico City has seen its population grow but also at a rate that is significantly below that of other metropolitan areas of the country. Both Mexico City and Pennsylvania have also experienced net outward migration.

Population movements are importantly intra-national and have evolved from the rural to urban movements of the 1970s to urban to urban movement, in which neither Mexico City nor Pennsylvania's largest cities have been able to participate beneficially. A final common migratory experience has been significant intra-urban movement, often from the city center to outlying areas of the same city, and in Mexico City to new areas of development; both movements have generated needs for expensive urban transportation infrastructure investments.

In addition to demographic change, Mexico City was powerfully affected by an external event – the passage of the North American Free Trade Area (NAFTA) agreement between Mexico, the US and Canada. Pennsylvania was not significantly affected by NAFTA, although there has been some transfer of production and employment from some areas of Pennsylvania to Mexico since 1995, especially in textiles, manufacturing assembly, and woodworking. It is clear to Sobrino that, in addition to its acknowledged benefits, economic internationalization entails a reliance on external markets that, in a situation such as that which has been experienced throughout the world economy since 2007, also increases a city's vulnerability. This vulnerability can cause all strategic economic planning quickly to become diminished in its practical relevance.

The lack of diffusion of the benefits of NAFTA from the North Frontier area to the rest of the country, noted by Sobrino, makes clear the lack of interaction and linkage among Mexico's regional economies. He finds a similar lack of interaction in business organizations situated in the various regions of Mexico. As in many other MEIs, in Pennsylvania we make much of the divisive role played by the ridges that cut diagonally through the topography of the Commonwealth, the division of areas north and south, or east and west of major interstate highways such as I-80. The creation of a real, functioning sense of a Pennsylvania economy could bring substantial benefits in terms of coordination of initiatives and shared visions of the future. This is inhibited by the fact that local identities have become so powerfully comprehended during the past century or more. Surely, we could do more in this area of public policy.

6. Cooperation and Competition Between Cities

In our open, globalized and rapidly evolving economy cities and urban regions increasingly find themselves in relationships that are either cooperative or competitive in nature. Airport hubs are a good example. Recently, US Air made the business decision to concentrate its international and continental flights in Philadelphia to the detriment of Pittsburgh, which had for decades served as one of the airline's major hubs. In this industry there is room for only two to four such hubs in the United States. Here competition reigns, with a classic winner and loser. In rail transportation, however, for freight and passengers to flow smoothly, quickly and efficiently, cities all along the rail line must cooperate to facilitate the achievement of a common objective. Here Philadelphia and Pittsburgh, with the Pennsylvania Railroad, had a relationship of cooperation; a cooperation that extended to New York, Washington and Chicago. In other industries, firms that have carved out a niche, or have protection through patents or something similar, in effect can function in relative isolation from either competition or cooperation. This is hardly a typical situation.

In Chapter 7, Jianfa Shen uses the experience of two cities in China, Hong Kong and Shenzhen, to show how a relationship of dominance and subordinacy can evolve to one of competition; to one that combines both competition and cooperation. Hong Kong was a dominant economy under British rule but since 1985 Shenzhen has developed rapidly in areas of production that were complementary to Hong Kong but then took on a life of their own. Shen carefully demonstrates how the role of each city has changed since the 1970s and how they now support each other. The areas of cooperation include their two airports, which have had to discover their comparative advantages and to define their individual roles. Direct investment and a shared labor pool are areas in which there has been additional cooperation; however in much of the service sector competition reigns.

Philadelphia has this sort of relationship with regions in New Jersey and Delaware, as well as with New York City and Baltimore in areas such as finance and shipping. Pittsburgh is more linked with contiguous regions in western Pennsylvania. The third metropolitan area, Allentown-Bethlehem-Easton, is a rich area for study of this sort of inter-city dynamic. All towns and cities are in competition with other similar entities, but on a smaller scale we have regions within which relationships of cooperation have been and can be developed. Several of the smaller cities in south-eastern Pennsylvania, such as Lancaster and Reading, the Central Susquehanna Valley, the towns that border on New Jersey, those of the central Northern Tier, and others are all candidates for cooperative ventures in industrial

clustering, tourism, joint marketing, and effective use of their universities and colleges, for example.

Shen makes explicit reference to cities and towns in Pennsylvania and concludes his chapter with a discussion of the similarities between them and Hong Kong–Shenzhen, and offers suggestions for us based on his study of these two very successful Chinese cities.

7. Loss of a Major Industry

The economic history of much of Pennsylvania is dominated by the power of its manufacturing firms, especially those in steel, railroads, metal working and coal, as well as woodworking, textiles and food processing. The years since 1985 have been dominated by the restructuring of this sector. Much of it has been relocated to the US South or to lower labor cost countries in Asia and Latin America; much of the rest of it has been reconstituted with technologies that require less labor and that may have a reduced economic impact on its region. Throughout the ‘industrial heartland’ cities and towns have been struggling to find a new place for themselves in the new economic space and in the new urban hierarchy. Some cities, such as Chicago, have been marvelously successful, while others, such as Buffalo and Cleveland, are still struggling to accomplish this.

There is perhaps no non-US city that can provide a better lesson for our cities with regard to redesigning itself than Turin, Italy. This city that once was a powerhouse in the production of automobiles and office equipment saw its two dominant firms, FIAT and Olivetti, virtually collapse in a period of two decades. Given the news in the papers and television these days, it is clear that FIAT has made a very impressive turnaround – but what of Turin? Can our cities and towns learn anything from this city’s experience with strategic rethinking and planning?

In Chapter 8, Daniele Ietri shows us that Turin can, indeed, demonstrate to our de-industrialized and restructured urban areas that rebirth is possible if local leaders are proactive and are effective in their efforts to reposition their urban economy. Part of the story is events that were part of the response of FIAT and part is the consequence of actions taken by the city itself. What interests us is the story of Turin’s planning response. Turin had an early period of recovery dashed by a city-based political corruption scandal that was concentrated on both Turin and Milan. Then in the early 1990s they elected a mayor who was able chart a course for the city and to begin the actions that the major players would have to take. The strategic planning response was threefold: (1) the transformation of the economic functions of the urban space, (2) development of the city’s education and innovation assets and potential, and (3) capturing the potential of the

Winter Olympic Games of 2006 and of the city as a cultural district, based on cultural institutions and on local cuisine and the 'slow food' movement. The point is to indicate that the city was able to take stock of its assets and potential and to design a strategic plan to realize their potential benefits.

Ietri takes from this experience two lessons that will be of interest to leaders of all MEIs. The first is the integration of the efforts of all residents from grassroots organizations to the policy elite. The second is the need to make explicit, functioning linkages between the city and the municipalities and firms of the surrounding urban region. In the case of Turin, many of the most innovative and internationally successful firms were in smaller towns in proximity to, but often ignored by, the city. Certainly an audit of the industrial landscape of other MEIs would identify several similar situations.

8. The Competitiveness of Northeastern US Cities

In an extremely ambitious project, in Chapter 9 Ni Pengfei presents his calculations of the competitiveness of 500 cities throughout the world. Using the resources of the Chinese Academy of Social Sciences, he is able to include data for 144 variables in ten categories of elements of urban competitiveness. Since Ni's report is essentially the presentation of his results, focusing on cities in the Northeastern US, there is no need to put it in a context that shows its relevance to our cities and towns.

Ranking cities in terms of competitiveness, places to retire, centers of IT or some other industrial sector, strength as a learning region, cultural life, and so forth, is something of a growth industry, but none is as comprehensive as is this study by Ni. Two things make this a uniquely valuable exercise in benchmarking. First, is the sophistication and openness of his methodology. Second, is the fact that given his methodology he is able to go beyond the basic ranking to show the relative strengths and weaknesses. This latter aspect makes his study of use to city strategic planners as they are able to go beyond the local perception of a city's assets and potential to a realistic appraisal of what is actually possible.

The cities of the Northeastern US come out very well in this global comparison of urban competitiveness, but those of Pennsylvania are not uniformly so – Philadelphia is ranked 19 but Pittsburgh is 108. It is when nine other individual indices are presented that the cities of Pennsylvania and Northeastern US fall behind in some of the rankings. This suggests that while Northeastern cities are quite competitive overall, each has some areas that are in need of attention.

The full Global Urban Competitiveness Report is a very rich and informative document, and the observations about Northeastern cities of

the US put our situation in the broad context of competitiveness beyond the region or the continent that is so necessary in today's economy.

9. Industrial Tourism Opportunities for City and Enterprise

As is the case with most MEIs, Pennsylvania has both a history and a present that are rich in firms and industries that produce goods and services, and use processes of production that are of great interest to the residents of the Commonwealth, and to others as well. In Chapter 10, Leo van den Berg et al. provide us with examples of what has been done in four industrial locations in Europe and one in China to develop industrial sites into attractive opportunities for industrial tourism. These are quite varied in nature and include the Volkswagen headquarters in Wolfsburg, Germany; industrial input firms in Cologne, Germany; Aurora pens in Turin, Italy; food processing in Pays de la Loire, France; port-related activities and food processing in Rotterdam, the Netherlands; and steel factories and creative business parks in Shanghai, China. This suggests that almost any industry is a candidate for beneficial industrial tourism.

The past is replete with examples of industries that dominated our past, such as steel and other manufacturing sites, coal-mining villages, various sites of railroad activity, as well as agricultural production. Some of these sites are already being developed and marketed as sites of industrial tourism. The most prominent such site in Pennsylvania is, of course, the Hershey Chocolate Company that began with tours through the actual production facility and now consists of tours through an exhibition center that depicts and explains all of the stages in the production of its chocolate products.

Van den Berg et al. show that industrial tourism is of benefit to both the region and to the company, if production is still active. The firm is able to display the qualities of its product it wants the consuming public to know, it helps to build brand familiarity and loyalty, and it may make industrial tourists less critical or more supportive in its relations with government. The urban region is able to gain tourism revenues, but of equal importance it is able to present a favorable image of itself – branding. Examples given include the aligning of Turin with excellence and Pays de la Loire with economic discovery.

The study done of the Pennsylvania economy by IBM Consulting Services (2005) mapped out the strengths of 11 of the state's regions in life sciences, high technology, advanced manufacturing and materials, and business services. These 11 regions include all counties of the Commonwealth and explicitly suggest opportunities for industrial tourism just in these four areas of the innovative sectors of the economy of the

future. In addition to the industries of the future, so to speak, there are many traditional industries, such as ‘metal-bending’, agricultural processing, inter-modal transportation and port activity, woodworking, and furniture. Finally, most of the Commonwealth’s universities and colleges have a long experience with campus tours, presentations with regard to what takes place in typical classrooms, interviews with professors, administrators and students. In some way the institutions of higher learning are models for industrial tourism and their experiences and knowledge could be of great benefit to the cities of and towns of MEIs and to their firms as they initiate their own programs of industrial tourism.

10. An Aging Population

As the introductory chapter tells us, Pennsylvania is the state with the 6th highest percentage of residents who are above the age of 65; projections suggest that the aging phenomenon will, along with urbanization, be one of the dominant features of the global economy during the next 40 years. Starting from such a high base, Pennsylvania is certain to be confronted with the fiscal, labor market, social and economic consequences of its aging population to a powerful degree. Aging presents government with impending burdens for retirement income, health care and long-term care; while these are serious problems, they are largely problems that must be met at the level of the national and state governments. Cities will have concerns about their own employees and some facilities that they will have to see are built, but their problems are lesser than they are for other levels of government. In fact, as Peter Karl Kresl argues in Chapter 11, there are significant benefits that can be gained by city governments – if they plan properly.

Kresl sees seniors as behaving differently in the years to come due to their economic and social characteristics – healthier, wealthier, better educated and more mobile. What he expects a significant percentage of them to do is: (1) move from rural and suburban areas into a university town or the center of a major city; (2) devote time and money to lifelong learning (intellectual activities) and (3) participate in cultural and arts sector activities and provide financial support for these institutions. Each of these activities will bring important benefits to the economies of cities and towns.

Most MEIs, as well as smaller college or university towns, have the potential to attract the sorts of seniors who can bring these positive economic benefits. The challenge is to ensure there is a sufficient supply of the desired urban amenities to be attractive to these seniors, and then to do effective marketing of their attributes. Upon retirement many seniors are very mobile and there is no reason why our towns and cities should not be attractive to them. Many towns may lack world-class cultural and other amenities, but

those in the eastern third of the Commonwealth are within two or three hours of New York, Philadelphia, Baltimore and Washington.

Given that the demographic changes are the result of actions that have been taken years or decades ago, this phenomenon and its consequences are certain to have their impacts. Local officials in our cities and towns can do much to ensure that their net effects are less negative than they need be and in many cases can actually be positive.

11. Urban Regions in a Global Economy

The final chapter in this book is an analysis of urban regions and their place in the global economy that is very rich in its implications for Pennsylvania's cities and towns. Saskia Sassen discusses the notion of an urban region with particular reference to its scale, that is, how extensive is the spatial reach of this type of entity? Similar to Daniele Ietri in his discussion of Turin and its place in the economic space of northwestern Italy, Sassen links the firms in a specific city to broader spaces that extend, in some cases, to the world economy. But Sassen argues that a firm operating in a mega region might find that it contains areas with the lower costs of operation they now find overseas; this would bring the added advantage of lower transport costs, which could then be a trade-off enabling regulations that prevent race-to-the-bottom wages. This possibility depends upon the specific activities of a firm.

During the recent past the forces of globalization have promoted an allocation of tasks that extends from the head office of the firm to affiliates located on other continents in which each office performs some task in a location that is optimally suited to it. This has led to the de-industrialization of traditional industrial economies, such as that of much of Pennsylvania. Porter's work on the competitiveness of the inner city and the recent increases in fuel prices both suggest that this division of labor will not be sustainable in the future. The consequence is that firms will have incentives to bring tasks back from low-wage Third World sites to lagging towns and districts that are in close proximity to the headquarters or main production site. This bodes well for towns in Pennsylvania that have suffered from loss of manufacturing jobs but which still have certain advantages such as a moderately skilled or trainable workforce, access to good truck or rail transportation, proximity to production centers of the firm, familiar legal and regulatory systems, and so forth. Both Philadelphia and Pittsburgh are such centers and beneficial relationships between them and nearby towns in the Commonwealth could be explored.

These relationships would be part of a mega region, the structure that Sassen argues is becoming dominant, along with global cities, throughout

the contemporary global economy. A mega region would be more extensive than, say, Philadelphia, and could encompass the entire Boston–Washington belt. There would be major cities with global reach as well as many underdeveloped communities. Within this mega region Philadelphia could create a niche for itself, one that would also accommodate places for many of our smaller towns and cities.

The example of Chicago is argued by Sassen to offer an illustration to other cities with industrial pasts. Chicago was late to the knowledge economy that is so crucial to today's economy, but it built a modern globally important urban economy that was based on legal, financial, trading and transportation assets and talents that were developed for its agro-industrial economy of trading and production. Philadelphia and Pittsburgh have developed assets and talents in the agro-industrial economy that was developed in the 19th century. Cities such as Buenos Aires have remade themselves after an event such as national bankruptcy. Other cities such as Detroit and many of the English manufacturing cities have failed to make the transition. Sassen finds that Detroit did not succeed in this process because it was basically dominated by one major industry – auto manufacturing: this led to a largely vertically integrated sector rather than the multiple distinct sectors and the complexities this entails we find in other major industrial cities. For Chicago its industrial past was a crucial part of its transition and the complexity of that past economy allowed it to extract multiple forms of specialized knowledge.

In essence, Sassen tells us that in the advanced knowledge economies of today and the future there will always be a 'vast array of low-wage jobs, low-profit and low-tech firms and under-resourced economic spaces . . . but the objective has to be upgrading those jobs, firms and spaces'. This is an instructive and optimistic vision with which it is appropriate to conclude this book.

NOTES

1. For the down side see Balchin et al. (2000) and Bartlett (1998).
2. Two classic positive views are Markusen (1996) and Porter (1995).
3. See: <www.gucp.org.cn>.

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