

COMPANION PAPER 6

GROWTH PATHWAYS

A Diagnostic Methodology for City Competitiveness

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# BACKGROUND AND ACKNOWLEDGEMENTS

**I**nterest in studying city competitiveness has skyrocketed in the last few years, although the topic itself is far from new. Mayors and city leaders have long worried about the obstacles to job creation, competitiveness and economic growth that plague their cities.

**This paper is part of a broader research initiative (the “Competitive Cities Knowledge Base” project)** managed jointly by the Trade & Competitiveness Global Practice and the Social, Urban, Rural and Resilience Global Practice of the World Bank Group. Its objective is to create a knowledge base on competitive cities, to improve the understanding of job creation at the city level, and to serve as a foundation for a Community of Practice on this topic for World Bank staff, academia, donor partners and practitioners.

**Our effort in this initiative has been to focus our energies on bringing a robust body of knowledge to our clients** – to address their questions on benchmarking their performance, on understanding what has worked elsewhere and what has not, and on discerning how to organize for delivery in different contexts.

**Our approach has focused on using different methodologies to tackle these questions – based on best practices, data availability, replicability and simplicity.** In many cases, we leveraged new and existing data sources to shed new light on some unanswered questions; in others, we conducted primary research since available data were inadequate. We looked at global and regional trends, comparing different typologies of cities – by income, sector and region. We buttressed these findings with econometric

“deep dives” and case studies in selected countries and cities. We are able to inform the continuing debates on what really matters for economic outcomes in cities with analysis of over-arching trends and associations, supplemented with rigorous analyses to identify causal relationships. We also try to “stand on the shoulders of giants” where possible: We use and make reference to existing resources (research, analysis, toolkits and experts).

The summary findings of the overall research are presented in the framework paper “Competitive Cities for Jobs and Growth.” **The objective of this paper is to present the Competitive Cities diagnostic methodology and to guide city practitioners through the diagnostic process, tools and resources that the Competitive Cities team offers.** This document was developed for use by World Bank Teams, for this reason only a short version is made available to the public. Please contact the authors for further details.

*This paper and the methodology were prepared by Dmitry Sivaev, with critical guidance from Austin Kilroy and with advice from a number of World Bank Group task team leaders including Smita Kuriakose, Andres F. Garcia, Angelica Nunez, Onur Ozlu, Fatima Shah and others. The co-TTLs of the CCKB project are Austin Kilroy and Megha Mukim. Overall guidance on the project has been provided by Stefano Negri, Sameh Wahba, Ceci Sager and Somik Lall as senior advisors.*

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## Introduction: Why Diagnose City Competitiveness?

**The first step to making a city more competitive is understanding its economy.** To be more competitive, cities need to create an environment in which businesses can thrive. But there is no single way of achieving that goal. Successful interventions should be tailored to the state of the city economy and informed by evidence on the state of its key drivers of competitiveness, the needs of local businesses and the vision of the city's future development path.

**City leaders are eager to know more about the performance of their cities.** World Bank Group experience of working with city-level clients often shows that one of the first questions mayors and city leaders ask is, "How is my city doing?" On the top level, they want to understand how their city compares to its neighbors, to competitor cities in the region, and to global leaders. But to inform policymaking, city leaders also need a deeper, detailed analysis of the factors and conditions that drive economic growth and competitiveness.

**This guide describes a diagnostic methodology that will help World Bank Group teams working on issues of city competitiveness address the diagnostic needs of city clients.** The methodology was designed as a part of the Competitive Cities Knowledge Base project and aims to complement other products of the Competitive Cities team. The methodology can be used as a self-standing product that can be adjusted according to the priorities of a specific engagement.

**The design of this tool was based on an extensive overview of Local Economic Development literature and consultations with World Bank Group Task Team Leaders with experience in working with city-level clients.** Elements of this methodology were tested in World Bank Group projects in South Africa, Malaysia, Kenya, Tanzania and Rwanda, along with a project covering several Central American countries. This paper does not engage in a deep theoretical justification of the approach or individual tools: Instead, it aims to guide competitiveness practitioners through the resources they can use and the approaches they can deploy in a city competitiveness diagnostic exercise.

**This guide is prepared for the benefit of World Bank Group Task Team Leaders and staff working with city clients on issues of competitiveness.**

**This guide is structured as follows:**

- *Part 1* explains the **structure** of the methodology, the framework that it uses and the principles that it follows.
- *Part 2* explains each of the **diagnostic exercises** included in this methodology in more detail, covering their goals, the tools they use, and the data, time and human resources they require. (Full chapter available in full version of this document, upon request.)
- *Part 3* explains the **resources** that the Competitive Cities team has developed to support World Bank Group task teams in using the Growth Pathways methodology. (Available in full version of this document, upon request.)
- *Part 4* explains how the different exercises offered in the methodology can combine to create a **holistic** diagnostic approach, and how this diagnostic process can fit into a larger World Bank Group engagement with a city client. (Available in full version of this document, upon request.)

## 1: What is the Growth Pathways methodology?

### *Growth Pathways is . . .*

. . . a **diagnostic methodology** that evaluates how competitive a city's economy is, identifies what its competitive advantages are, and highlights the key barriers that businesses in the city are facing.

. . . a **demand-driven approach designed to address the questions that World Bank Group task teams are most frequently asked by city clients**: "How is my city doing?" What are my strengths and my weaknesses? What are the issues that I need to be addressing? Should I be focusing on specific industries and clusters, and which ones have greater potential for my city?" Growth Pathways, by itself, might not be able to answer these difficult questions, but it will offer an approach and the tools that can help guide user through the process of seeking the answers.

. . . **designed to be used by World Bank Group teams** working with cities on issues of competitiveness and Private Sector Development.

### *Growth Pathways offers . . .*

1. **A framework that defines city competitiveness and its drivers** and categorizes it into components, structuring the diagnostic exercise accordingly.
2. **Three diagnostic exercises**:
  - a. **Competitive City Snapshot** – offers an overview of the city economy and benchmarking of the city against global competitors on key indicators of economic performance and drivers of growth.
  - b. **Deep Dives** – analyze the potential of a given sector or type of businesses (as defined by size, ownership type and industrial sector), and the constraints that the selected industry or group of businesses faces.
  - c. **Constraints Diagnostic** – provides a detailed analysis of cross-cutting drivers of city competitiveness.
3. **A set of resources to support and inform these exercises**:

- a. **Competitive Cities Snapshot tool** – an automated Microsoft-Excel-based tool that helps quickly visualize data and create an overview of the city's economic performance, allowing it to be compared to the performance of other cities.
- b. **Growth Pathways catalogue** – a collection of data sources, indicators, tools, techniques, expert contacts, questionnaires and industrial-sector profiles that can be used to inform in-depth diagnostic exercises.

### *Principles of Growth Pathways*

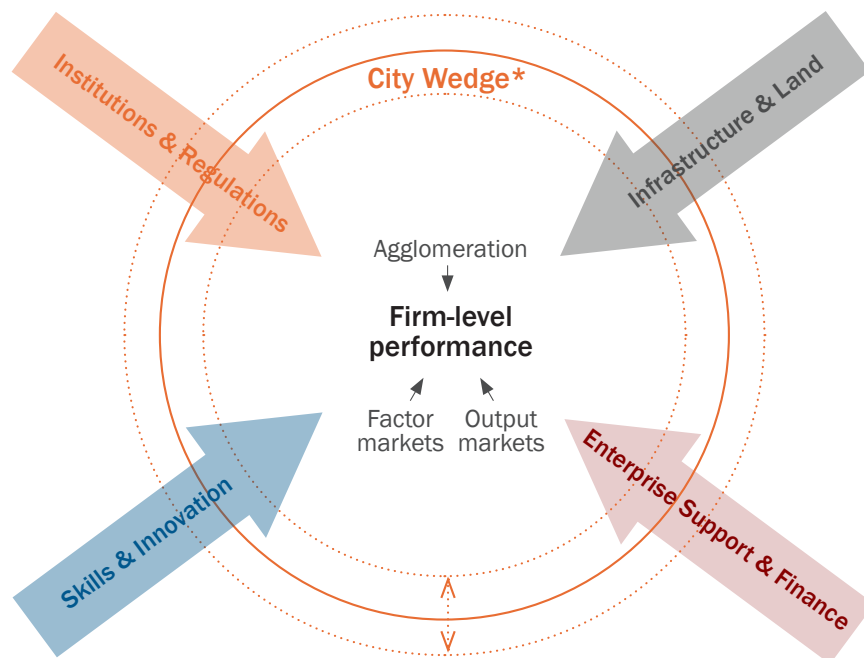
- **No need to reinvent the wheel.** There are many indicators, tools and methodologies that have been used successfully to diagnose a city economy. What is needed is not new tools, but resources that offer easy access to various diagnostic resources and a framework for putting them together into a holistic diagnostic exercise to inform decisions on economic development in a city.
- **Flexibility and adoptability.** Cities are diverse. They differ in size, income level, economic structure, geography, skills, resource endowments, the availability of data and the capacity and level of organization of public- and private-sector actors. Although there are indicators and analytical tools that are applicable across the board, there is no single approach to diagnosing a city economy. This is why Growth Pathways is a flexible methodology that is designed to be adapted to individual city circumstances.
- **An evolving methodology.** Growth Pathways is not a finished product – nor is it intended to be. Growth Pathways instead is a combination of an analytical framework and a living catalogue of tools. Users will contribute tools and datasets to this catalogue as they engage with cities and as they identify new needs and new resources. This approach requires taking ownership of the methodology, but it also ensures that it won't fall out of date.
- **Knowing your limits.** Cities are complex. Constraints that city economies face may vary from cargo-processing inefficiencies in the local port, to specific clauses in the land-use code, to a lack of technical skills in a given industry. Developing a tool that aspires to drill down into the specifics, in great depth of detail, is too ambitious and is likely to be counterproductive, given the vast expertise that is already held by World Bank Group teams and external experts. This is why, when it comes to getting down to the technical details of problems, Growth Pathways relies on attracting experienced experts rather than offering a generic one-size-fits-all solution.

## The framework behind Growth Pathways

**Growth Pathways uses the Competitive Cities conceptual framework.** The main characteristics of this framework are:

- A **city** is defined as a metropolitan area according to the geographic distance that allows for daily professional interactions, and contains the extent of labor and housing markets, which can also be referred to as the “travel to work area.”
- The **competitiveness** of a city economy is defined by the performance of its firms, their ability to grow and their ability to create jobs.
- **Firm-level performance is a function of factor markets, entrepreneurial ability, output markets and agglomeration effects — and cities provide several intermediating factors in that process.** Inputs such as land, labor and capital are configured by entrepreneurs, churning raw materials into products that are transported and sold. Agglomeration effects lubricate this process by creating local pools of skilled labor, shared infrastructure and knowledge spillovers among firms and among employees.
- These conditions cannot be addressed directly, but they are shaped in various degrees by a large set of city-level **determinants**, which we arrange into four key groups:
  1. **Institutions and Regulations:** a broad array of conditions for doing business, ranging from taxes to business licensing to the level of corruption.
  2. **Infrastructure and Land:** the ease of gaining access to land suitable for development, the physical infrastructure (such as roads, utility networks, ports and airports) and the information technology infrastructure.
  3. **Skills and Innovation:** the local knowledge base, including the quality of human capital, the quality of schools, hospitals, universities, vocational training and research institutions, and the density of innovation networks.
  4. **Enterprise Support and Finance:** the local financial base, including access to capital, subsidies, incentives, export assistance, and various business capacity-development and support programs.
- **The ability of various city actors to change these conditions is defined by the “City Wedge.”** The larger the wedge, the more control the city actors have over the determinants of competitiveness. The city wedge includes:
  - **The Mayor’s Wedge:** the administrative remit and implementation capacity of the city government.
  - **Growth Coalitions:** the collaboration between the private sector, the city administration and other local actors.
  - **Intergovernmental relations:** the ability of the city to engage other levels of government, including regional and national authorities and leaders of neighboring jurisdictions.

**Figure 1: Competitive Cities Conceptual Framework**





**Based on this framework, the Growth Pathways methodology identifies the following goals:**

- Understand the overall performance of the city economy, focusing on the private sector.
- Understand the strengths and the weaknesses of the city with regard to the four groups of determinant conditions.
- Acknowledge that the needs of various businesses differ; understand the nature of the types of businesses that populate the city's economy, their potential for growth and job creation; and understand whether the city offers the determinant conditions that they require.

**We have structured the diagnostic resources according to the “Matrix” conceptual framework. (Figure 2)**

- **Rows** represent different determinants of competitiveness that affect the performance of firms and outcomes for the city. In addition to the four main groups of determinants featured in the framework, rows include the agglomeration conditions – a major source of productivity in cities –and the other endowments category that

includes conditions that are exogenous and that cannot be changed by the city stakeholders, but may still have an impact on the local economy (geography, natural resources, history and global market trends).

- **Columns** represent different types of firms, which can be defined based on industrial sector, the size of business (micro, small, medium-sized, large) or ownership (state-owned enterprises, foreign-owned, private domestically owned) or a combination of such criteria.

The matrix allows analysts to look at the city economy as a space where different conditions may have different degrees of relevance for different types of businesses. **What really matters is the interrelationship among the conditions that a city can offer and the needs of businesses that have a potential (given the external market conditions) to inspire and deliver jobs.**

**Figure 2: The matrix representation of a city economy.**

	Competitiveness factors	Sectors		Sizeband		Ownership	
		Manuf. (e.g.)	ICT (e.g.)	SMEs (e.g.)	MNCs (e.g.)	Foreign owned	Local business
<b>Institutions and Regulations</b>	Taxes, licenses, duties Legal system Market regulations Local government						
<b>Infrastructure and Land</b>	Physical infrastructure Social infrastructure Housing						
<b>Skills and Innovation</b>	Human capital Education and research Networks						
<b>Enterprise Support and Finance</b>	Financial maturity Cost of credit						
<b>Agglomeration</b>	Industrial mix/clustering Local supply chains						
<b>Other endowments</b>	Location, history, amenities City image and other intangibles						

## Part 2: How does Growth Pathways work?

### Overview of diagnostic exercises

The Growth Pathways methodology includes three diagnostic exercises. Each addresses a different type of client question and uses a different set of techniques and tools. However, all three diagnostics are organized around the Matrix model of a city's economy and together make up a holistic approach to city competitiveness. (Figure 3)

Figure 3 Structure of Growth Pathways methodology

### Competitive Cities Snapshot

Provides an overview of the city economy focusing on changes in key economic indicators, benchmarks of the city's economic performance and enabling conditions, and an analysis of the city's economic structure.

**Why do it:** The snapshot answers the question from city leaders, "How is my city doing?"

**What it delivers:** An overview of the city's economic performance, plus two types of hypotheses: (i) constraints on city competitiveness and (ii) sections of the city's businesses (defined by sector, size or type of ownership) that offer growth potential or are underperforming and thus deserve special attention.

Competitiveness factors	Sectors		Sizeband		Ownership	
	Manuf. (e.g.)	ICT (e.g.)	SMEs (e.g.)	MNCs (e.g.)	Foreign owned	Local business
<b>Institutions and Regulations</b>						
<b>Infrastructure and Land</b>						
<b>Skills and Innovation</b>						
<b>Enterprise Support and Finance</b>						
<b>Agglomeration</b>						
<b>Other endowments</b>						

### Constraints Diagnostics

This level of analysis zooms into economywide conditions that appear in the snapshot to be major barriers to growth of local businesses across industrial sectors and business types.

**Why do it:** Our research indicates that successful cities use both targeted interventions and general business-climate reforms. Such conditions may include infrastructure, regulations, skills and innovation issues, enterprise support and access to finance.

**What it delivers:** An in-depth understanding of the issues related to a specific determinant of city-level economic competitiveness.

### Deep Dives

Focuses on selected industrial sectors or firm size bands and ownership types to identify their competitive potential and to identify key constraints.

**Why do it:** Our approach to city competitiveness starts from firm-level needs. Needs of firms differ across industries, firm sizes and ownership types. Thus the most efficient interventions are sometimes those that identify and target the needs of specific business with growth potential.

**What it delivers:** A focus on issues that need to be addressed to support specific types of businesses in the city.

**Deep-dive diagnostics combines two analytical techniques:**

1. In-depth prioritization – a detailed analysis of industry potential using market-research techniques.
2. Driving conditions benchmarking – a study of conditions that define growth in specific industries.

## Team contacts

The full version of this paper can be made available upon request. Please contact one of the team members for more details.

The Growth Pathways diagnostic methodology for cities was developed as a part of Competitive Cities Knowledge Base (CCKB) project, which is a joint effort of the Trade and Competitiveness and Social, Urban and Rural Development Global Practices of the World Bank Group.

If you are interested in learning more about the tool, please contact Dmitry Sivaev at [dsivaev@worldbank.org](mailto:dsivaev@worldbank.org), or CCKB task team leaders Austin Kilroy ([akilroy@worldbank.org](mailto:akilroy@worldbank.org)) and Megha Mukim ([mmukim@worldbank.org](mailto:mmukim@worldbank.org)).

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