'Lies, Damned Lies, and Statistics'

A Critical Examination of City Ranking Studies

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The ICE Committee

Established in 1997, the Intergovernmental Committee for Economic and Labour Force Development in Toronto (the ICE Committee) coordinates the economic and labour force development activities of the Government of Canada, the Province of Ontario, and the City of Toronto.



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Hardly a month goes by without a report that a particular city is the best place to live, work, invest in, or visit. The proliferation of rankings and ratings, not only of cities but also of universities and countries, makes for an easy news story. Reporting in numerical terms that Vancouver provides a quality of life superior to that of Johannesburg, or that Cleveland is a better place to do business than Paris, satisfies a contemporary appetite for cutand-dried empirically grounded facts. Local media coverage of a city's changing position in rankings has become a regular event that politicians and public officials dare not ignore. Downward movement is seen as a black eye; upward advancement is taken as validation of policy choices.

All of this of course occurs without regard to the design, intended audience, and purpose of the ranking exercise. As Mark Twain acerbically suggested, there are three types of falsehoods: lies, damned lies, and statistics. Statistics are the most pernicious because casual and even specialist readers assume their authority. Given their ubiquity, the use, misuse, and misinterpretation of city rankings is certainly a topic worth exploring.

This project has two goals. The first is to show how Toronto rates in frequently cited rankings. The second, more general objective is to demystify city ranking studies through analysis of the methods used to produce their findings, and on this basis to comment on how policymakers should interpret them. Despite the focus on Toronto, the ICE Committee hopes that this report will invigorate a discussion of these studies and how they are used, not only here but in other cities around the world.

Eleven studies, 44 editions

Eleven studies were grouped into four types. There is considerable divergence among these studies in terms of their focus, cities covered, and source data.

Some are one-off products while others present comparable data at regular intervals. Where multiple editions have been published since 2005, all available are included, for a total of 44. Comparing multiple editions of the same study is useful because it enables an assessment of change over time not only in the results — scores and rankings — but also in the methods used to derive them.

ТҮРЕ	TITLE AND PUBLISHER	2005	2006	2007	2008	2009	2010	2011
Business cost-oriented studies focus on the relative cost of doing business or maintaining employees in different cities from the perspective of multinational corporations.	Prices and Earnings Survey, UBS							
	<i>Cost of Living Survey</i> , Mercer Consulting							
	<i>Competitive Alternatives,</i> KPMG							
Livability-oriented studies compare the standard of living in different cities	<i>Livability Ranking Overview</i> , Economist Intelligence Unit							
from the perspective of multinational firms as they define hardship allowances for expatriate employees.	<i>Quality of Living Survey</i> , Mercer Consulting	•						
Performance-oriented studies assess the relative health, competitiveness, status, or importance of cities in the global economy.	<i>Centers of Commerce Index</i> , Mastercard Worldwide							
	<i>Cities of Opportunity</i> , PriceWaterhouseCoopers							
	<i>Scorecard on Prosperity,</i> Toronto Board of Trade							
	<i>Global Metro Monitor,</i> Brookings Institution & LSE Cities							
Sectoral studies focus on the competitiveness of a particular industrial sector or activity within the broader urban economy.	Global Financial Centres Index, Z/Yen (London)							
	Innovation Cities Top 100 Index, 2ThinkNow (Melbourne)							

THE 11 STUDIES BY TYPE

How well does Toronto perform?

The studies surveyed suggest that the Toronto region is successful and competitive at the global scale. Indeed, Toronto belongs to a rarified cluster of wealthy cities with diverse and growing populations and economies, and which are located in industrialized countries with stable political and economic systems.

Viewed in relation to cities in both developed and developing countries, Toronto consistently ranks in the top 20 per cent. As cities in developed countries tend to cluster together in their performance, it is only when Toronto is directly compared to other wealthy cities that minor differences in performance levels become perceptible. A narrow focus on small movements in rank position from year to year obscures a generally positive picture.

TORONTO'S RANK IN MOST RECENT ACCESSIBLE EDITION WITH CLOSEST COMPARATORS

BUSINESS-COST- ORIENTED STUDIES	LIVABILITY-ORIENTED STUDIES	PERFORMANCE- ORIENTED STUDIES	SECTORAL STUDIES
Toronto costs are lower than most many American and European cities.			
Comparators: → UBS purchasing power index (2011): Brussels, Helsinki, London, Copenhagen → Mercer (2009): Vilnius, Seattle, Tianjin, Denver → KPMG (2010): Vancouver, Atlanta, Manchester, Melbourne	Comparators: → Mercer (2010): Amsterdam, Brussels, Ottawa, Berlin → EIU (2011): Melbourne, Vienna, Calgary, Helsinki	 TBOT: 8 / 24 Brookings: 63 / 150 Comparators: Mastercard (2008): Madrid, Sydney, Coperhagen, Zürich PWC (2011): New York, San Francisco, Stockholm TBOT (2011): Dallas, Seattle, Madrid, New York Brookings post-recession recovery index (2010): Houston, Cincinnati, Brisbane, Bucharest 	Comparators: → GFCI (2011): Geneva, Sydney, Boston, San Francisco → 2ThinkNow (2010): Copenhagen, Strasbourg, Melbourne, Milan



Toronto's strengths and weaknesses

Generally speaking, the studies suggest that Toronto's strengths are its livability and ease of doing business, buoyed by its stable political and economic context and excellent public health and education systems. Toronto's business costs are low compared to many American and European cities. In addition, Toronto's recovery from the recent recession has been more robust than that of London, Chicago, Paris, or Los Angeles. The studies that focused on financial services found Toronto to be a diversified second-tier financial services hub. Z/Yen's reputation survey found that Toronto is well regarded by professionals around the world.

This rosy picture should not be interpreted as a call to complacency. Toronto's weaknesses are real: low productivity, a poor record on innovation and commercialization, inadequate investment in transportation and other infrastructure, and a growing city-suburb divide. While perhaps growing in importance as a financial services centre, Toronto is not yet in the same league as London, New York, Tokyo, or even Chicago in terms of the volume of transactions. These facts have been demonstrated before in other research; they are only confirmed by the city-ranking studies surveyed. Comparison to Montreal and Vancouver shows that Canada's other two large city-regions share Toronto's strengths and weaknesses. This suggests that these problems and their solutions are national in scope.

How should policymakers and journalists interpret city ranking studies?

Norman Mailer once distinguished between facts and "factoids," which he defined as "facts which have no existence before appearing in a magazine or newspaper." City ranking studies are factoid generators par excellence. They feed the appetite of news outlets for information that requires no resources to report and whose validity is assumed. Yet while this project is critical of the methods used in city ranking studies, they can be useful if read carefully and in proper context. Here are some guideline:

What is the study's intended audience and purpose? Not all studies are designed to assess a city's general performance or status. Indeed, most are specific in focus. The business cost- and livability-oriented reports are commercial products with a narrow purpose — to help multinational corporations determine hardship allowances for expatriate executives. Focusing on well-off expatriates' purchasing power and living standards in foreign cities tells us virtually nothing about the lived experience of local residents, yet such rankings are often taken as general indicators of a city's economic performance or livability.

Does the study include too much information? The performance-oriented studies combine different types of indicators into an overall score. The mixing together of economic and livability indicators with measures of a city's relative importance as a global node may lead to questionable tradeoffs. A city that performs poorly in economic terms may perform well on livability indicators and vice versa. Two cities with the same overall score or rank may have quite different underlying strengths and weaknesses. In addition to overall ratings, many of the studies provide separate scores and rankings for component "domains" or "lenses." These tell more about a city's performance than combined indexes.

Are scores presented in addition to rankings? Tight clustering of scores is evident in many of the studies, especially among wealthy cities in industrialized countries. As a result, cities with similar scores may rank far apart, leading to an exaggeration of differences in performance. Instead of looking at rankings, look at the scores — only then will clusters and patterns become visible.

How have the data been manipulated and processed? Some studies go to great lengths to convert the original data into scores, rankings, letter grades, and other categories. The more the underlying information is manipulated, however, the more likely that the real differences in performance between cities are obscured.

What is the impact of currency exchange rates? In order to compare cities located in different currency zones, indicators of business cost are usually pegged to a reference city such as New York. While this is defensible if the primary concern is the purchasing power of New Yorkers, it creates a false image of volatility in the scores and rankings because the U.S. dollar is itself a moving target. It also tells us little about the cost of living or doing business of resident Canadians, whose wages and expenditures are denominated in Canadian dollars. If the data were re-expressed from the point of view of a Toronto-based investor seeking to expand in the United States, the image of American stability and Canadian volatility would be reversed.

- **Do ongoing studies change the rules as they go?** Single-year studies are snapshots. Trends only become visible if we look at how city scores and rankings change over time. To be comparable over time, succeeding editions must apply the same methods to the same data and the same cities. The business cost- and livability-oriented studies tend to be the most consistent. Unfortunately, almost every performance-oriented study surveyed changed data sources and cities between editions. These changes are presented as positive innovations, even though they undermine the comparability of findings over time.
- How old is the underlying information? A full range of data is rarely available for a single point in time, and so analysts do their best by cobbling together information of varying vintages. A study dated "2011" probably contains information from five-year-old Census data and surveys undertaken in 2008 or 2009. City ranking studies therefore cannot tell us anything about the *immediate* health of a city's economy or society. They can only tell us about the recent and not-so-recent past. This must be kept in mind in the context of the business cycle. Without a sense of cities' performance over an extended period of time something that only the long-running business cost and livability studies provide there is a risk of misstating the impact of a recession or boom on a city's position relative to its peers.
- Are apples being compared to apples? Each study looks at a different collection of cities. Some only compare the wealthy cities of the developed West. Some restrict their boundaries to North America. Others include "emerging" cities in developing countries. Still others only look at financial or commercial hubs. This is important because when compared to cities in developing countries, Western cities perform relatively similarly. Only when wealthy cities are compared to each other do distinctions appear.

There is also the problem of how metropolitan areas are defined. There are any number of official ways to define "Toronto" — the Census Metropolitan Area, the Greater Toronto Area including or excluding Hamilton, or the Greater Golden Horseshoe being several examples. The Canadian and American governments' definitions of metropolitan areas differ, and each differs from those used in the European Union and elsewhere. This means that the studies may not be capturing the most appropriate region, potentially leading to miscomparisons. Unfortunately, most of the studies are silent on which definition they are using.

In a competitive global economy where location-specific costs and place qualities drive prosperity, policymakers at all levels concerned with the health of cities must pay attention to what is going on elsewhere. If properly interpreted, city ranking studies are useful diagnostic tools. In light of their methodological shortcomings they should, however, be taken with a grain of salt. City ranking studies should be the start of research and analysis by policymakers, not the end. They can help policymakers decide what questions to ask and on what issues to focus, but they should be supplemented by other tools.