Productive Transformation of Cities

The role of public policy in transforming the economies of six cities in the global south.

This discussion paper illustrates the process of productive transformation in six cities, across three continents. Case studies provide insight into the evolving capabilities of a range of cities to transform their economies through public policy intervention. Local and national governments performed different roles in each case, from provision of infrastructure and public goods to direct support to firms and industries. Local governments can make a significant impact with a clear vision of their roles and effective implementation capabilities.

About productive transformation policies

Increasingly, national and local economies must adapt and innovate by diversifying and upgrading their productive capacity. They must avoid stagnation in context of evolving economic, social and environmental circumstances. Cities benefit from more inclusive patterns of growth, greater resource efficiency, reduced environmental degradation, and enhanced social stability and inclusion. National and local governments play vital roles in facilitating the transformation process, in part due to their influence over the business environment and their potential to steer investment decisions in more productive, equitable and sustainable directions.

Productive transformation policies (PTP) are defined as public programmes and instruments designed to create jobs and achieve sustainable growth through higher productivity and promotion of competitive sectors. PTP often focus on cluster and value chain development, agglomerations, foreign investment, business environment, and skills development. PTP involve dialogue between the public and private sector to ensure equity through prudent approaches to urban planning, city design, financing and governance.

Role of PTP in driving economic complexity

PTP facilitate a diversified economy that supports improved growth and innovation, by leveraging productive capacities and producing increasingly complex products. Simply, the more advanced an economy, the more growth and innovation it can achieve. PTP enable two important features of economic transformation which are technological upgrading and industrial diversification.

While public policies are essential to support infant industries, and promote agglomerations and clusters, allocation of funds to support private sector activities can be controversial given limited resources of governments. UN-Habitat’s recent publication, The Role of Cities in Productive Transformation Policies, examines six cities to assess when, to what extent, and in which clusters PTP are most relevant. Although limited in their scope, the case studies demonstrate advancements in the role of urban economies and horizontal interventions to achieve productive transformation.
Lessons from six cities

Governments in all cities recognize the necessity of productive development policies. Enabling a more complex productive economy is necessary for economic development and growth. Information Communications Technology (ICT) is a crosscutting force that incites both economic deepening and widening.

**CAPE TOWN**

Cape Town’s economy has experienced a decline in manufacturing services and rapid growth in financial and community service sectors post-apartheid. Although Cape Town’s economy has performed reasonably well by South African standards, employment growth has been insufficient to absorb the expanding workforce, and questions surround the long-term viability of Cape Town’s economic trajectory. Pervasive poverty, unemployment and inequality undermine the city’s economic performance and pose major risks to political stability and challenges to policymakers. Key sectors of the city’s economy require technological upgrading to maintain and enhance productivity and competitiveness. With the support of government and private stakeholders, the ICT sector is helping to upgrade the local economy. Stakeholders are introducing new products and new processes, diversifying the city economy by promoting productive activities and developing local skills. However, scaling-up must focus on productive policies which are not currently in place.

Since the 1990s, Peru and Lima’s economies have experienced strong and constant GDP growth. The export industry has played a strong role, although import growth has outpaced export growth. Greater dynamism associated with certain internal market sectors and important inflows of foreign direct investment (FDI) constitute the main changes to the productive sector. The relative importance and contribution to the economy of goods-producing sectors and industry has fallen with increased dominance of the service sector. Commerce, services and manufacturing sectors contribute most greatly to employment; most of businesses in these sectors are microenterprises. Although labour force indicators have improved in the last decade, underemployment rates remain constant, as does income inequality. Public policy is challenged to reduce the significant productivity gap between different-sized businesses. Current policy tools exist at national and local levels to nurture micro and small-enterprises.

**NAIROBI**

Nairobi’s legacy of colonialism and structural-adjustment policies following Kenya’s independence in the 1960s has lasting implications. Local government traditionally lacked power and resources because of centralized government. In 2010 a new constitution considerably devolved powers to the county level. Nairobi has a relatively diversified economy and produces around half of Kenya’s Gross Domestic Product (GDP). Its dynamism is limited by issues including: unemployment and underemployment; lack of financing; and a poor business environment that results from inadequate and expensive electricity, serious traffic congestion, infrastructure constraints and bureaucratic government procedures. Over the last decade, Nairobi’s economic growth rate has increased slowly, due in part to improvements in the performance of agricultural, tourism and telecommunications sectors. Kenya’s current five-year plan introduces productive policies to strengthen competitiveness through accelerated governance reforms and increased public investments in transport, energy, water and ICT infrastructure. The plan promotes ICT and business process outsourcing as one of six key sectors intended to drive overall economic growth.

**QUITO**

Quito’s economic structure has transformed in recent decades, following its liberalization and public sector reforms in the 1990s, and dollarization in 2000. Decentralization has enabled institutional adjustment and innovation, and transformed metropolitan management structure and practices. It has also improved city infrastructure, coverage and quality of basic services, workforce education, poverty and inequality, quality of life, and economic activity. Ecuador’s political agenda fully integrates transformative policies from local to national levels. Microenterprises dominate Quito’s business landscape and firms are largely specialized, particularly in the service sector. Although professional and real estate sectors grew rapidly in recent years and contribute most to Gross Value Added (GVA), commerce and manufacturing are the greatest contributors to employment. Ongoing dollarization and favorable international terms of exchange that result in strong price signals and high rates of return on Ecuador’s main export sectors hinder productive diversification. The economy is further challenged by the industrial sector’s reliance on low-technology goods and exploitation of natural resources.

**DILI**

Timor-Leste is a former Portuguese colony that gained independence in 1975 and was shortly thereafter occupied by Indonesia. Indonesia invested significantly in infrastructure, including educational institutions, roads and bridges; however, this infrastructure was destroyed by Indonesian troops following the Timorese people’s vote for independence via referendum in 1999. After two years of transitional administration by the United Nations and a massive influx of foreign aid, Timor-Leste reestablished its status as an independent nation in 2002. It has since experienced fast economic growth as a result of oil prosperity, although it remains one of the world’s least developed countries and Southeast Asia’s poorest nation. Foreign aid and dollarization permitted reconstruction and capacity building, and inflation control, respectively, but caused distortions in the economy with lasting consequences. At present, government spending drives Timor-Leste’s economy which is highly reliant on petroleum revenues. Further, the productive sector is not developed and most consumption consists of imported goods and services. Employment outside of government, oil and agricultural sectors is limited, particularly outside of Dili which employs over 80 per cent of all employed persons in the country and generates 90 per cent of the country’s total income. Dili and Timor-Leste’s most pressing challenges including: high youth unemployment, rural poverty, low per capita incomes, a weak public sector, a dormant indigenous private sector, imported inflation, lack of employment opportunities, a shortage of locally-sourced foods and dwindling petroleum reserves. With no current municipal administration, national government must play a strong and active role in promoting diversification toward structural transformation.

**VIET NAM**

Viet Nam has been able to rapidly increase its productive capacities and diversify over the past two decades, and Ho Chi Minh City (HCMC) has been at the center of that productive transformation. Since implementation of Doi Moi (1986) and other national reforms, and the end of the USA’s embargo (1996), Viet Nam has had one of the highest rates of economic growth in the world and is among the most attractive of developing countries for FDI. Massive FDI in the 1990s and modernization of industry, with emergence of the private sector after 2000, transformed HCMC’s economy from one dominated by labour-intensive industries, such as apparel and footwear, to a service, industry, and construction-oriented economy. HCMC continues to transform its productive sector by targeting increasingly complex industries such as electronics, telecom and office equipment sectors. HCMC has also become the financial center for Viet Nam’s banking sector and a hub for those working in professional, scientific and technical activities. The State has played a fundamental, active role in facilitating the economy’s development.
Role of national economic policies

Both Ecuador and Peru have established economic development plans to guide transformation of their economies. National strategies for poverty eradication and transformation of the productive matrix are overarching strategies for Ecuador’s National Plan of Wellbeing (2013-2017). Ecuador’s national strategy for the productive matrix organizes around four pillars: productive diversification, adding value to the existing productive sectors, selective import substitution, and support of new products for export. Likewise, Peru’s Multiannual Strategic Sector Plan (2012-2016) is built around three pillars: promotion of productivity and value added, regulation of sector economic activities, and institutional strengthening. International trade has been promoted in Peru’s trade policy through numerous bilateral trade agreements.

Similar to Ecuador and Peru, Timor-Leste has adopted a national policy framework, known as the Strategic Development Plan. The Plan organizes around four pillars - social capital, infrastructure development, economic development and institutional framework - with the aim to transition Timor-Leste from a low income to an upper middle income country by 2030. The Plan sets out short, medium and long-term goals, a policy framework to develop a diversified economy, a front-loading fiscal policy to build core productive infrastructure and a programme of economic reforms.

The programme includes establishment of Special Economic Zones, telecommunications liberalization, creation of a development bank and streamlining business regulations. Recent and ongoing investments, including capital and development projects and public transfers for social, education and health sectors, follow strategy laid out in the Plan.

Since reunification in 1975, Viet Nam has focused on reconstruction and development. Adopted in 1986, Doi Moi stimulated exports by promoting inward FDI and reducing tariff and non-tariff barriers to international trade. Over subsequent decades, a concert of economic and land reforms, along with dissolution of export bans and quotas, resulted in improved market access, improved business environment and enhanced trade relations which have driven Viet Nam’s growth. Recent plans and reforms have: targeted new industry sectors, particularly high technology; set priority for boosting economic structural change for industrialization and modernization; and invested in capital and development projects aimed to attract sector-specific foreign capital.

Role of local economic policies

Decentralized government structure enables both local governments of Quito, Lima and HCMC to pursue PTP that are in line with national-level policy and relevant to local context. In Quito, both provincial and municipal governments formulate PTP. The provincial government launched the Productive Transformation Agenda (2010-2013) with the aim to enable endogenous development, construct a more competitive environment with better opportunities in internal and external markets, and prioritize tourism, agro-exports, healthy food and specialized services and manufacturing.

Productive transformation policies by country

This graph shows the relationship between current levels of national complexity, controlled for by income (horizontal axis), and ease of producing new products (vertical axis).

Source: Prepared by authors with data from Center for International Development, Harvard University
The Municipality promotes productive transformation through: the Metropolitan Development Plan (2012-2014) and the Metropolitan Territorial Zoning Plan (2012-2022); and several mayoral initiatives, including construction of a Special Development Zone, industrial parks and services, and the Convention Centre. Municipal efforts emphasize ten productive focus areas and one priority sector which are considered to have the greatest potential for generating value added for exportation and for small and medium producers.

At the local level, the Metropolitan Municipality of Lima implements policies and programmes in support of the productive sector, historically in favour of micro and small-enterprises. The Regional Development Plan of Lima emerged from a strategic planning process. It defined four pillars relating to Lima as: 1) an intercultural, healthy, educated city for citizens; 2) a polycentric, connected, sustainable city; 3) a competitive knowledge centre promoting national industrialization, tourism, specialized services and entrepreneurship; and 4) a city-region with a participatory and efficient metro government. The Plan also sets out several goals specific to the productive sectors, including: 1) enhancing linkages between training, research and innovation in productive inter-district and local economies; 2) strategic positioning of the city; and 3) guaranteeing employment and/or business initiatives through better education, training and qualifications.

HCMC began actively implementing policies related to urban and productive development in the early 2000s, following State policy that limited population thereby decentralizing the city’s development to bordering provinces. HCMC has promoted technology renewal at a local level since 2006 with launch of the multi-pronged Technology Development Programme (2006-2010) which aimed and has succeeded in reducing HCMC’s share of resource and labour-intensive industries. Ongoing transformative efforts seek to institutionalize, modernize and globalize HCMC’s economy by developing highly qualified human resources in science and technology to improve competitiveness of enterprises through technological innovation, and increase high-tech and high-value added industry establishments.

Role of spatial and urban transformation
Lima, Quito and HCMC emphasize physical planning as a component of their economic planning strategy. Quito’s planning efforts create multiple centres and make explicit links to preserve ecologically sensitive areas in order to create an environmental foundation for the local economy. These goals aim to improve employment opportunities and living conditions in outer-lying areas that were traditionally less economically advantaged.

They improve mobility and reduce dependency on private vehicles, thereby enhancing social inclusion and minimizing environmental impact. Similarly, Lima’s planning efforts emphasize inter-district development with the objective to increase work opportunities in different areas of the city, improving connections between districts and the city’s economic base. Integration into global markets has resulted in spatial relocation of various economic activities, helping to promote social equity and create market niches and investment areas. Both Quito and Lima are pursuing necessary investments in their transport sectors to better achieve goals for urban mobility, social equity and environmental sustainability.

Lima’s new main poles of economic activity
In Lima, integration into global markets has resulted in spatial relocation of economic activities and formation of small, independent cities that make up metropolitan Lima.
Over the next decade, HCMC plans to spend nearly US$500 billion on a socio-economic development plan. The plan includes: development and improvement of key road infrastructures; development of four satellite cities around a central area; consolidation of specific industries and land uses in different quadrants of the city; and establishment of 22 new export processing and industrial zones.

**Role of ICT in productive transformation**

Technological upgrading and industrial diversification are critical to generate jobs and boost incomes for achievement of inclusive growth and more sustainable urbanization. ICT is widely regarded as a potential catalyst for economic transformation and human development in the following ways:

- As a new form of infrastructure or platform for the economy at large
- As a magnet for FDI
- As an enabler for growth of indigenous firms with original ICT products and services
- As a means of improving the efficiency of business processes in other sectors
- As tools for improving the efficiency and responsiveness of public services
- By developing new skills and capabilities for workers, consumers, active citizens, public service users and entrepreneurs

It is suggested that ICT holds the potential to enable Africa to leapfrog through the development process and create a platform on which a diverse group of stakeholders can participate in the economy and society. National and local governments in Cape Town and Nairobi share commitment to use ICT to accelerate, broaden and deepen economic progress.

Cape Town’s ICT sector has benefited from promotion and investment at the national, provincial and local levels, and coordination with global players, and foreign and local entrepreneurs. At the national level, the State Information Technology Agency funds provincial governments to expand ICT infrastructure. Western Cape provincial government supplements national revenues and develops partnerships to support wireless connectivity in government offices, schools, health clinics and libraries.

Western Cape’s economic development agency provides technical and logistical assistance, and networking support to foreign investors. To address challenges and enhance linkages between the technology sector and supporting industries, provincial and city agencies formed the Cape Information Technology Initiative (CITI).

CITI’s programmes support: the development of startups, incubator facilities, technical skills, local clustering, research, market growth, and trade investment; and creation of forums to encourage networking and dialogue among stakeholders. Local initiatives complement government-
funded projects, as with Silicon Cape which brings together local and foreign investors, technical talent and entrepreneurs to foster startup growth and promote the region as a global technology innovation hub.

Nairobi is the centre of private investment in ICT infrastructure and services in Kenya. The city’s development blueprint acknowledges the currently inadequate ICT infrastructure and places emphasis on ICT’s contribution to economic growth. National reforms in 1998 established an enabling legislative framework to support the emerging ICT sector. Subsequent policy in 2006 committed the government to invest in ICT infrastructure, including fibre optics, and support services to improve transportation, electricity and water services. The policy also expressed intention to: 1) provide incentives for the private sector to further develop ICT infrastructure and 2) support software, manufacturing and assembly of ICT equipment.

The policy emphasized the need for government to adopt e-government, e-commerce, and electronic security, develop ICT content, provide ICT training and develop human resources. Successes in Nairobi’s ICT sector are largely driven by innovations in mobile banking (i.e. M-Pesa and related technologies). These have spurred opportunity for many small-scale enterprises and influenced uptake of e-commerce across multiple sectors. The M-Pesa revolution has helped build Nairobi’s reputation for technology startups, and spawned development of several clusters of creative enterprises, innovation hubs and incubators that are enticing global players.

Lessons Learned

1. PTP can promote inclusive economic growth. For best results, PTP should be aligned across governmental levels, from national to local.
2. City and spatial planning can advance implementation of PTP by promoting infrastructure, logistics and innovation.
3. Supporting small and microenterprises, and would-be entrepreneurs is an important way to reduce inequalities and generate jobs and employment.
4. Cities need to increase capabilities to produce value-added products, promote job creation and increase incomes.

More to Read

2. Harvard University, Center for International Development. 2015. The Observatory of Economic Complexity. Available at: https://atlas.media.mit.edu/en/