# SEOUL ORCHESTRATING AN INNOVATION-LED ECONOMY

POPULATION IN 2010: 23,907,009 ● EMPLOYMENT IN 2010: 11,887,826 GROSS VALUE ADDED (GVA) PER PERSON IN 2007: \$21,372

With almost 30 years of double-digit growth and a string of technological breakthroughs captivating the global market, Seoul earned its reputation as a "miracle economy." Its growth and success can be traced back to central government's vision to transform the country into a global leader in exports. Success is also linked to the collaborative relationship between government and leading conglomerates, which allowed these firms to gain a significant share of global markets in a short time.

Seoul's economic transformation begins in the 1960s when South Korea's central government pursued a policy of export-oriented industrialization. A five-year economic development plan resulted in the growth of the textile and apparel industry as the leading sector in Seoul, marking its entry into the global marketplace.

### The Challenge:

With Seoul increasingly tied to the global market, broader economic forces created a new level of uncertainty and vulnerability. Starting in 1970s, oil price hikes, rapid fluctuations in international interest rates, and an increasingly strong won (the Korean currency) boosted the costs of manufacturing goods. Seoul's export economy was undercut by other Asian competitors, encouraging South Korea to shift towards high tech production. These events galvanized new waves of central government policies, public-private partnerships, and initiatives by local government. The effect of the Asian financial crisis of 1997 ensured further sharpening of these policies and programs.

# Leadership and Intentionality

South Korea's highly centralized government used its range of powers to orchestrate a competitive future. It identified new market opportunities; incentivized companies to enter specific sectors; promoted collaborative R&D projects in very specific industries; and identified and eliminated market redundancies. In short, the government virtually ensured all the conditions were in place for firms to thrive.

# This included:

Advancing research and development in new and emerging sectors: Central government's impact on national industry is exemplified by its focus on the information and communication technology sector. The Electronics Industry Promotion Law increased investments in electronics research and swayed large companies to focus heavily on this sector. The central government also supported the creation of the Korea Institute of Electronics Technology (KIET), which conducted research into semiconductor design, processes, and systems.

Accelerating Market Entry with Public-Partnerships: The central government spearheaded the "Very-Large-Scale-Integration" (VLSI) research consortium when three major Korean semiconductor producers were making overlapping but redundant investments. With a clear vision to produce the world's next generation memory chip, government and private companies pooled their resources to accelerate R&D. Combined efforts not only brought the chip quickly to market, it laid the groundwork for a chip that became the world market leader just a few years later. Samsung, one of the Seoul companies supported by such policies, grew from virtually no global market share in memory chips in 1984 to just over 10 percent of the global market share in 1993.

### **Interventions**

In the past decade, Seoul's economic successes have broadened in large part to a growing number of local actors taking part. Devolution, enacted in 1995, officially allowed locally-elected mayors and governors (at the regional level) to participate. Locally-driven efforts include:

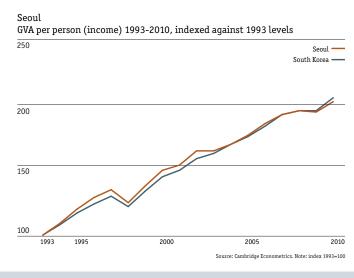
Creating knowledge-based industrial clusters. Seoul city government has pursued an industrial policy known as the Creative Industry Promotion Program that promotes knowledge-based industries as the new engine in Seoul's economy. In 2007, the city government designated six industries as the new growth engines: tourism; design and fashion; digital content; conventions; research and development (R&D) in information technology (IT), nanotechnology (NT), and biotechnology (BT); and financial and business services. Each industrial strand is associated with a major new development project in Seoul to agglomerate related firms.

Transforming a former industrial park to a 'digital industrial complex' to advance high-tech industries. The Seoul city government redeveloped this aging former industrial complex in Guro into an urban high-tech industrial complex to nurture and advance high-tech firms. Within a decade, this newly named Seoul Digital Industrial Complex attracted more than 6,700 businesses, primarily consisting of small start-up venture companies, collectively employing more than 100,000 people and earning approximately \$8 billion in revenue annually.

Transforming a waste facility into an "information city" to advance the media and entertainment industries. Seoul city government has realized Samgam Digital Media City (DMC), a state-of-the-art information city to nurture and advance the digital media industry. With a size comparable to New York City's Central Park, DMC is completely wired with sophisticated IT infrastructure and services. While still under construction, DMC has attracted several hundred digital media firms and houses over 25,000 employees.

# Results

As of 2003, the capital region accounted for 55 percent of all manufacturing firms, 73 percent of total R&D institutions, and 77 percent of Korea's venture companies, and 88 percent of all headquarters of major large enterprises. While the industrial success of Seoul was clearly borne out of strong central government policies and regulations, Seoul's continued economic success thrives in part from partnerships and new policies intentionally designed to improve and support Seoul.



Left
Seoul has very closely matched
South Korea in terms of income,
with a very strong growth
pattern only broken by the Asian
Financial Crisis at the end of the
last decade.