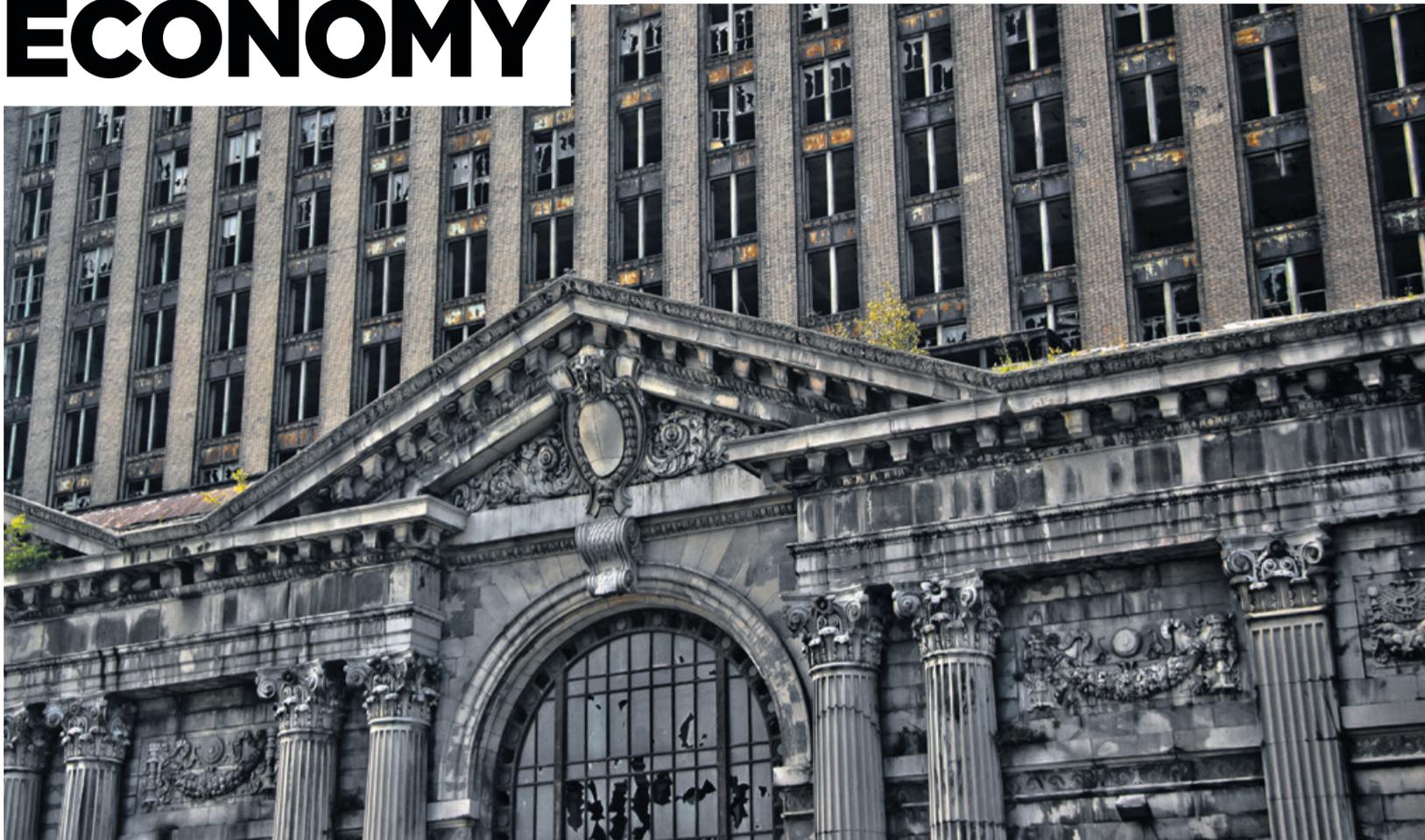


THE URBAN ECONOMY



A recent image of Michigan Central Station: Detroit's livelihood has been ravaged by the decline of the American motor industry

TRANSFORMATION Well-meaning attempts at urban regeneration by post-industrial cities in the UK and the west are being challenged by alternative approaches in East Asia that are transforming manufacturing bases into world-leading, knowledge-based economies. By Alex Warnock-Smith

■ Sustaining a successful relationship between economic productivity and urban development has characterised the rise and fall of cities throughout history. The once solid bond between urbanism and industry has become fragile in the last half century, with post-industrialisation causing many cities to struggle to adapt to massive urban change. To survive the 21st century, cities need to provide a platform for constantly evolving economic and industrial enterprises, and to foster productive partnerships that can adapt to change.

Sustaining a healthy balance between industrial change and urban development has proven difficult. The migration of manufacturing industries from the west to the developing world has posed immense challenges for urban centres across the globe, with cities in developing nations struggling to deal with the social and economic impacts of massive urbanisation.

The UK's post-industrial cities have implemented various approaches to urban regeneration in the last quarter century in an attempt to stimulate economic renewal.

Leeds has navigated a relatively successful transformation from wool production to professional services, becoming a northern centre for legal and financial industries, and has pumped significant money into revamping its town centre to

attract and retain the educated talent it requires.

Similarly, Manchester and Liverpool have undergone several urban regeneration projects, converting post-industrial landscapes into attractive living and working spaces for the creative industries, and transforming their waterside infrastructure from sites of industrial production into vibrant centres for leisure and entertainment.

Bigger challenges lie ahead if these cities are to sustain an upward curve in an increasingly uncertain global economy. The relatively small-scale urban regeneration projects of northern England are unlikely to deliver a long-term social and economic infrastructure that is flexible and dynamic enough to sustain their prosperity for the next century, nor the growth of the wider economic region. It is no longer possible for major cities to rely on a single industrial or economic sector; there is immense pressure on them to diversify.

An approach to addressing these challenges is the creation of knowledge-based economies – capitalising upon a city's intellectual and creative resources to provide a broader platform for economic potential. San Francisco is a good example of this. The Santa Clara valley in the south Bay Area, with Stanford University as a key element, became the location of a dynamic cluster of high-tech design and production companies.

Recognising the connection between urbanism and innovation, the city took an ambitious approach to the design and planning of its expansion, creating a mixed-use urban environment containing research institutions, industrial facilities and start-up business spaces in a large-scale development ribbon now known as Silicon Valley.

Silicon Valley would not be successful in isolation without the social and cultural resources of San Francisco. Key to the success of a knowledge-based economy is creating environments that accommodate social and cultural diversity and a range of different lifestyles and age groups, in order to promote continual economic enterprise across generations.

In East Asia, cities are experimenting in a more dynamic manner with urbanisation and economic transformation, seeking a more fluid relationship between the forces of economic production and the form and structure of the city.

Municipal authorities in Taiwan, China and Vietnam are investigating the potential of high-tech industries and promoting productive partnerships between civic institutions, commercial developers and high-tech industrial producers.

In Vietnam, this approach is transforming Hanoi from a relatively small city to an expanded polycentric city region, which will encompass a num-

ber of centres of mixed high-tech industrial research and manufacturing facilities in an expansive interconnected urban territory.

The city is incentivising biomedical industries to invest in Hanoi, working with international developers and corporations to provide mixed-

↳ The once solid bond between urbanism and industry has become fragile

centres of biomedical research and design, manufacturing plants and teaching hospitals.

After an international design competition in 2008, the city is working towards a large-scale strategic urban framework for Hanoi's expansion, and has been investing in new transport infrastructure. In the meantime, the large swathes of new city that are developing around Hanoi's perimeter (high-rise office blocks, gated residential developments, conference centres and leisure parks) do little to provide the socially integrated and ecologically sustainable kind of environment required to support true urban and economic growth.

Nearby Taiwan has undergone many significant economic transformations in the past few decades, from a manufacturing base in the 1980s to a high-tech centre. As its manufacturing plants are steadily migrating to cheaper locations in China, the island is capitalising upon its talent and transforming itself into a knowledge-based economy, aiming to be a world centre for the creative industries in the next 10 years.

The Taiwanese government has realised that one of its greatest assets for this transformation is its cities and has invested millions in public-transport infrastructure, connecting their cities, universities and production centres with an enviable high-speed rail network.

Recognising the connection between space and economic prosperity, Taipei City Government commissioned a series of international design workshops to speculate on the city's future as a centre for creative industries. The government invited international teams of academics, architects and urban designers to work alongside Taiwanese universities, developers, industrialists and politicians, to develop strategies for the urban and economic renewal of Taiwan's post-industrial centres. This was not urban planning in the conventional sense, and the teams of experts developed integrated spatial and economic proposals, using urban design as a tool for developing Taiwan's future economic evolution.

Detroit is a chilling example of the effect of economic decline – once a major centre for the American motor industry, the city is now a devastated ghost town with little hope of economic or urban renewal in the near future. Between 2000 and 2010, the city's population declined by 25 per cent. 237,500 people left the city, a rate of one person every 22 minutes, a rate only exceeded by the residents of New Orleans following Hurricane Katrina in 2005. The decline of 'Motor City', home to General Motors, Ford and Chrysler, is entwined with its rapid de-industrialisation. Between 2000 and 2009, Detroit's Wayne County alone lost more than half of all its industrial jobs. These conditions raise many pressing questions about how cities, as physical, spatial and regulatory entities, can evolve and adapt to economic change.

Economic prosperity in the next century will not be created in large industrial factories or manufacturing plants. Nor will it be stimulated by short-term urban regeneration projects. A more dynamic relationship between public and private sectors, government and industry, intellect and entrepreneurship, will create a broader territory of productive relationships for continual economic and urban evolution. This will take place in interconnected cities that provide integrated urban environments for innovation to take place. ●