



**Structural Transformation, Adaptability and City Economic Evolutions**  
*An ESRC-Funded Research Project under the ESRC Urban Transformations Initiative*

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## **WORKING PAPER 9**

# **Case Study Report**

# **MIDDLESBROUGH-STOCKTON**

# **AND TEES VALLEY**

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# 1 Introduction

Middlesbrough and Stockton Travel-to-Work Area (TTWA) encompasses the towns of Middlesbrough (population currently about 138,000), Stockton-on-Tees (population about 84,000), Billingham (population about 36,000), and Redcar (population about 38,000) and their surrounding areas; see Figure 1. The area is located in the North-East of England, between the historic counties of Durham and the North Riding of Yorkshire.

**Figure 1 Middlesbrough and Stockton Travel-to-Work Area, and surrounding Travel-to-Work Areas (2011 definition)**



**Figure 2** Tees Valley, and its constituent local authorities



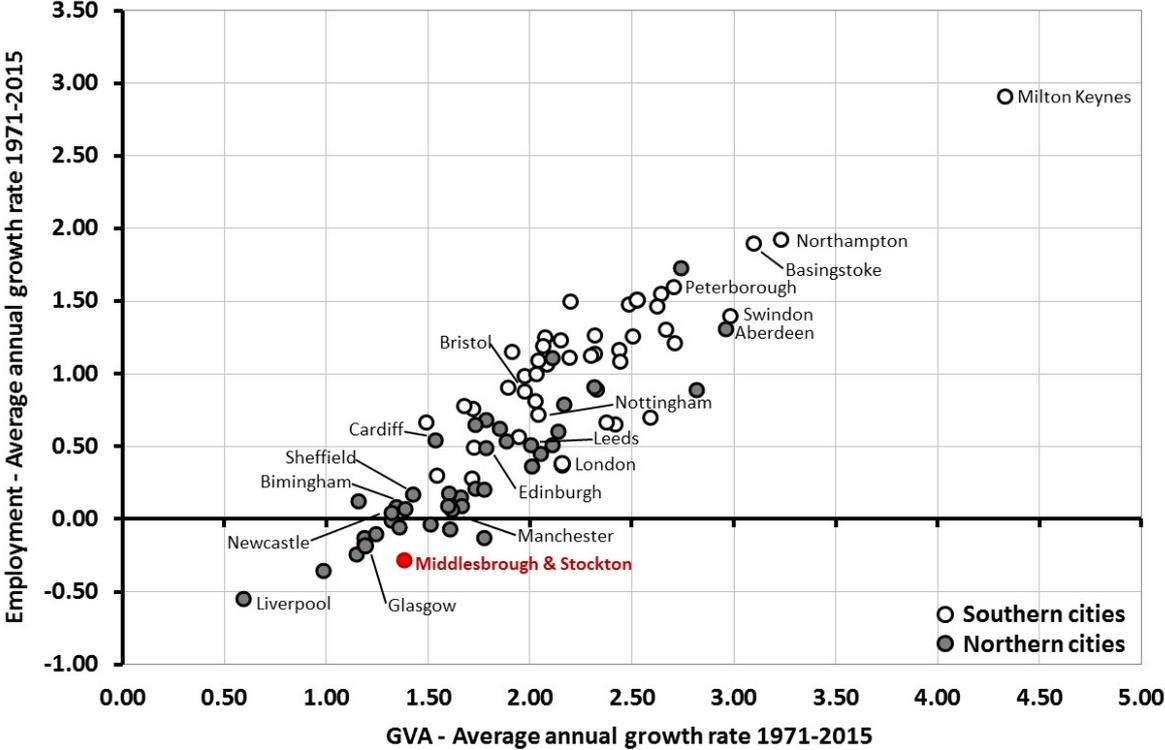
Middlesbrough and Stockton TTWA constitutes the central part of the larger Tees Valley city-region (total population about 670,000). This city-region is also comprised of the towns of Hartlepool (population about 92,000), and Darlington (population about 105,000), and the areas around these towns; see Figure 2. The local authorities of Middlesbrough, Stockton-on-Tees, Redcar and Cleveland, Hartlepool, and Darlington established the Tees Valley Combined Authority in 2016, which holds several powers and responsibilities with regard to economic development and transport in the city-region.

In this report, most quantitative data will refer to Middlesbrough and Stockton TTWA, while for the discussion on the evolution of institutions and policies also the broader city-region is considered. There are strong historic, economic, and functional links between the various towns. In terms of administrative organisation, Hartlepool has been formally part of the city-region since 1974, and Darlington since 1996.

The experience of Tees Valley, and in particular the Middlesbrough and Stockton area, over the last 5 decades, may be said to be representative for many other smaller, Northern cities in the United Kingdom, specifically places once specialised in particular branches of manufacturing, like Hull, Swansea, Stoke, Dundee, Motherwell, Coventry, etc. Over the period since the early 1970s, these smaller, formerly industrial cities generally experienced slow output growth, and poor – often negative – growth in employment. Because of their reliance on one or two dominant industries, these places were often heavily affected by deindustrialisation in the 1970s and 1980s. In contrast to many smaller cities in mainly the South of England (such as Peterborough, Northampton, Basingstoke, Guildford, Swindon, etc.) – which seem to have benefitted from the growth in segments of the service sector – these places have struggled in the ‘postindustrial’ economy. Furthermore, compared to larger and more diversified manufacturing centres (such as Birmingham, Glasgow, Newcastle, Sheffield, etc.), these cities could not benefit from a

role as a regional centre for certain functions (e.g. regional head quarters or more specialised retail), and had fewer (immediate) options to grow and attract and new economic activities in the service sector; hence their adaptation process has often been more arduous (also see Figure 3).

**Figure 3 Performance in terms of GVA and employment of Middlesbrough & Stockton TTWA relative to other cities, 1971-2015**

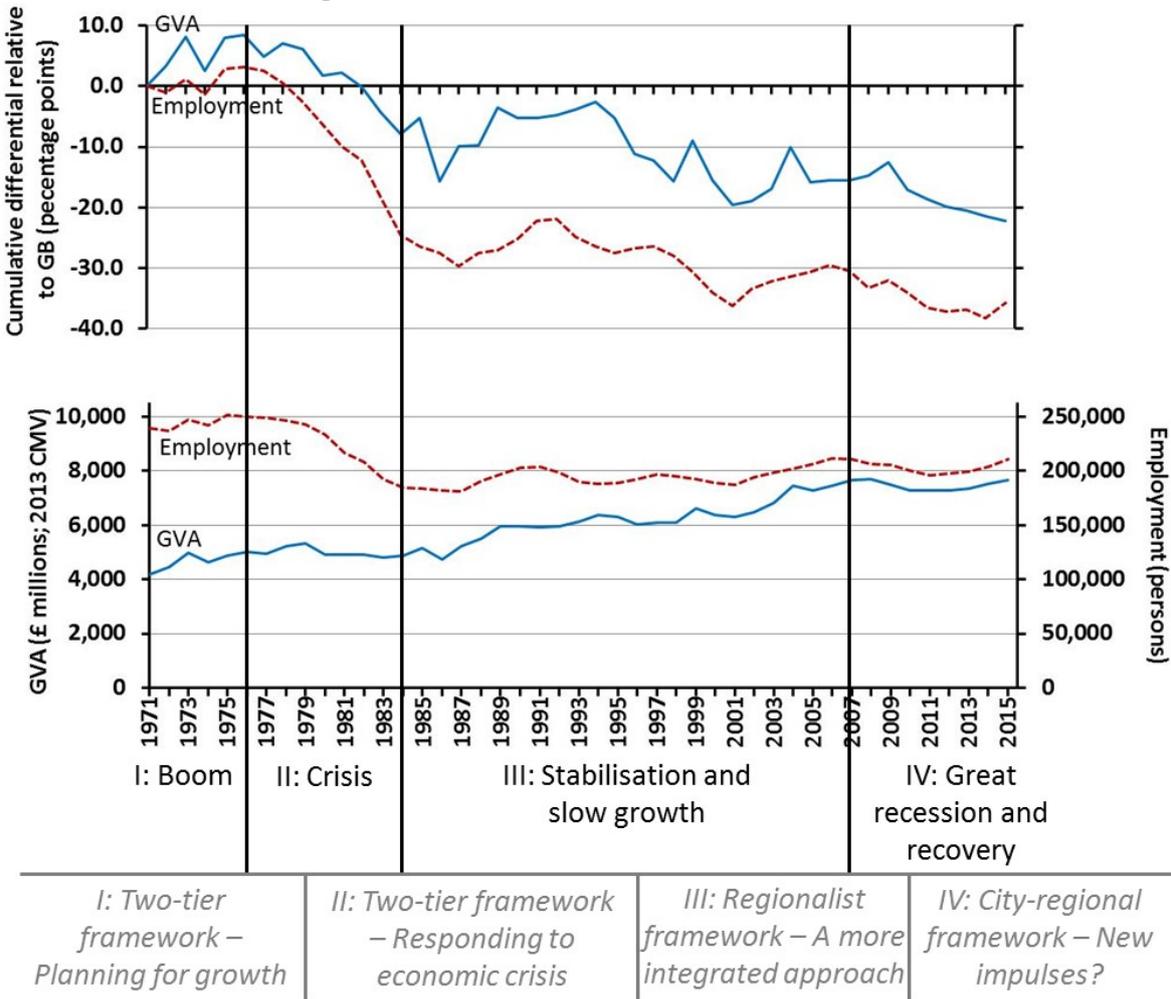


Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

Economic change in the Middlesbrough and Stockton area over the last 5 decades, can be divided in four distinct episodes (see Figure 4). In the first episode from the late 1960s until the mid-1970s, the area experienced a boom period, fueled by new investment in heavy industry and in supporting infrastructure. In the next episode from 1976 until about 1984, this turned into a severe crisis, as heavy industry and other manufacturing went through a period of closures and large-scale restructuring operations. In episode 3 – from 1984 until 2007 the situation stabilized and there was a period of slow growth, both in terms of output and employment. However, also in this period the performance of the Middlesbrough and Stockton economy has been lagging compared to the British economy as a whole. The Great Recession and the period of recovery since, mark episode 4 from 2007 until date. The area was not affected by the Great Recession as much in comparison to many other places, but the recovery from around 2011 onward has been slow.

Also with regard to the evolution of governance and policy for economic development since the late 1960s, four episodes can be distinguished (also represented in Figure 4). In the mid-1960s, the Middlesbrough and Stockton area was designated as a growth pole for the North East of England, and an extensive investment programme was enacted (driven by the UK government, as well as the large companies with significant operations in the area: ICI and British Steel). During this episode, planning for growth and modernizing the area, were seen as the main policy challenges. To support these undertakings, the central government initially put in place a one-tier local government framework (with the formation of Teesside County Borough in 1968), but in 1974 this was changed to a two-tier framework, through the creation of the non-metropolitan county of Cleveland (encompassing Middlesbrough, Stockton, Langbaugh and Hartlepool boroughs). During the severe economic crisis and its aftermath, from the late 1970s until the mid-1990s, the governance arrangements proved to be inadequate to effectively deal with the new economic realities, and failed to support a coordinated policy response. What is more, the main responses by the Conservative governments at the central level in the 1980s and 1990s were rather insensitive to the particular needs of the area; and did little to reverse the area's fortunes. It is only from the late 1990s onwards that important actors within the area have been better able to take matters in their own hands, and as a result the approach to the economic development of the area has become more integrated and coordinated. This new episode in governance and policy was on the one hand facilitated by arrangements put in place by the local authorities themselves to support the cooperation within the city-region after the abolition of Cleveland County in 1996. And on the other hand, by several New Labour policies introduced from 1997 onwards, which had the effect of more resources and powers becoming available for more bespoke economic development initiatives in the area. In 2010 the incoming Coalition-government once more overhauled the main policies for subnational economic development in the UK, and these new policies have been continued by the subsequent Conservative governments. Notwithstanding these changes, the governance arrangements which had developed in previous episode to assist the economic development of the Tees Valley region, were further reinforced and formalised, culminating in the establishment of the Tees Valley Combined Authority in 2016, with its own metropolitan mayor since 2017. This more coordinated and more integrated approach, seems to have aided in generating some new impulses for economic dynamism in the area.

**Figure 4 Major episodes of economic, institutional and policy change in Middlesbrough-Stockton, 1971-2015**



Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

The next section details the economic development of the Tees Valley area since the early 19<sup>th</sup> century until the 1970s. Subsequently, the main structural changes in the area's economy are described in chapter 3. Chapter 4 then analyses the overall performance of the area's economy, and examines how successful the local economy has been in adapting to economic change over the past five decades. Chapters 5 and 6 respectively outline the evolution of institutional arrangements and the evolution of policies with regard to the economic development of Tees Valley. In Chapter 7 the impact of institutional arrangements and policies on the adaptation process within the area's economy, is assessed.

## 2 Context and brief economic history

The industrialisation of Tees Valley started in the 1820s, and during the 19th century the area developed into a major centre for iron production and subsequently also steel production. In the wake of this, also heavy engineering and shipbuilding developed as important industries. Furthermore, from the 1920s onward, the chemical industry emerged to rapidly become one of the mainstays of the local economy. As such the area was thus very much at the heart of the development of 'carboniferous capitalism' in the 19<sup>th</sup> and early 20<sup>th</sup> century (Mumford, 1934; Briggs, 1990). The prevalence of heavy industry over many years, has to a considerable extent shaped the social relations and built environment in the area.

The start of the industrialisation of the Tees Valley area can be traced back to the Stockton and Darlington Railway, opened in 1825. The Stockton and Darlington Railway brought coal from the south-west part of the Durham coalfield to Stockton, where it could be distributed further. The export trade to London and other markets, was so successful however, that it was soon decided to extend the railway to Middlesbrough further downstream, where the Tees was deeper. The owners of the railway – a group of Quaker men from Darlington – bought the piece of land that would serve as the new terminus of the line (the 'Middlesbrough Estate'), and started to develop this into a new town. In 1850 the area would receive an important new impulse to its economic development: the Cleveland main seam of iron ore was discovered in the Cleveland Hills near Eston. After this, Middlesbrough and its surrounding area, were transformed. With a great supply of iron stone and coal in the vicinity, together with good provisions for transport because of the river and developing railway network, the location was ideally suited for the development of the iron industry. From the 1850s onwards the area developed into the most important area for iron production in the United Kingdom, and – by extension – the world at this time: by the 1870s it produced about 30% of pig iron in the UK, and about 14-15% of pig iron in the world (Yasumoto, 2011). The growth in iron-production underpinned the growth of shipbuilding, heavy engineering, and railway industries in the North-East of England. Coal mining in Durham, iron stone mining in the Cleveland Hills, iron production - and from the 1880s onwards, steel production – in and around Middlesbrough, shipbuilding and heavy engineering in Tyneside, Wearside and also Teesside (especially Hartlepool), and railway engineering in Newcastle and Darlington, formed one large industrial complex, in which the different parts fed on the other parts to create distinct economies of localisation and a particular dynamism (see Milne, 2006; Tomaney, 2006).

With rapid economic growth came rapid increase of the population (mainly through immigration from rural areas around Tees Valley, but also Ireland). The expansion of Middlesbrough and its surrounding area were shaped by the interests of heavy industry.

The iron and steel industries – and to a lesser extent heavy engineering and shipbuilding – not only shaped the development of the economy, but also of the landscape and the local society. Large plants and wharfs covered both sides of the river Tees from Stockton to the coast, low quality housing estates sprung up in the vicinity of the works, smoke and soot filled the air, and the river was heavily polluted by discharges and waste. Civic traditions and social institutions were mostly lacking in the community (Briggs, 1963; Hudson and Sadler, 1985); and industrial relations were characterised by a system in which large corporations provided for many of the needs of their workers (housing, job security, benefits, etc.) in return for a dependable and cooperative workforce. The population in the area was dominated by (mostly male) manufacturing workers, while the middle class remained comparatively small; increasingly so when by the end of the 19th century the ironmasters and their descendants ceased to live in the town, and moved to the countryside (Briggs, 1963; Yasumoto, 2011). Hence, as Middlesbrough and the other towns in its vicinity developed, these mainly catered to the immediate necessities of the working class: cheap housing near the works, food, drink and clothing.

By the time of the First World War, the numerous iron and steel firms that existed in the area in the 19th century, had amalgamated to three principal firms: Bolckow Vaughan (founded in 1840), Dorman Long (founded in 1875), and South Durham Steel and Iron (founded in 1898). By then metal manufacturing had already lost a part of its competitive edge. The industry had moved from wrought iron as the primary output, to steel; which meant that economies of scale became more important. The comparatively new plants constructed by the competition in continental Europe, especially in Germany, could take greater advantage of this. Moreover, iron ore deposits in the Cleveland Hills were gradually becoming depleted from the 1910s onwards. The interwar years were a particularly difficult period for the area (and more generally for the North-East). Domestic demand dropped and ground was lost to competitors in export markets. The iron and steel industry tried to respond by moving into the production of more high value products such as tubes and constructional steel, and diversifying into bridge building and heavy engineering. In 1929, Dorman Long took over Bolckow Vaughan, which was nearly bankrupt. Other industries, most notably shipbuilding in Hartlepool and along the Tees-river, declined considerably (North, 1975)

This period also saw the emergence of the chemical industry, which would quickly become a new staple industry in the area. In 1918, the government devised a scheme to construct a plant for the production of synthetic ammonia (to be used for the manufacture of explosives). Billingham was chosen as the location for this plant, because it offered a large, accessible, flat site with adequate supplies of water and power. Moreover, there was already some small-scale chemical industry in Billingham on the back of the extraction of salt deposits in the vicinity. With the end of the First World War, the ammonia-scheme was subsequently taken over by Brunner Mond in 1920, which was to use synthetic ammonia for the production of fertilisers and dyestuffs. In 1926 Brunner Mond merged

with three other chemical companies to form Imperial Chemical Industries (ICI). Billingham developed into one of the main production and research and development locations for the new firm (North, 1975; Beynon et al., 1986). With the expansion of the chemical complex, it drew in large amounts of labour from the Durham coalfield and industries in recession. With this, Billingham quickly transformed from a village into a company town (similar to Middlesbrough and surrounding towns in the 19th century), in which much of the housing and basic community services were provided for by ICI (Beynon et al., 1986).

The period following the Second World War saw a marked increase of government involvement in the development of industry in the area. The post-war Labour-government tried to implement a programme of nationalising several key industries. The iron and steel industry (with Dorman Long and South Durham as the main companies in the area) was nationalised in 1951; but this was quickly undone by the new Conservative government, coming into power later in 1951. Still investment in iron and steel became subject to approval by a new Iron and Steel Board, set up in 1953 (North, 1975). With the Distribution of Industry Acts of 1945 and 1950, a system was furthermore put in place to stimulate investment in manufacturing in certain areas (Development Areas) through active spatial planning and grants, and discourage investment in other areas (mainly in the South of England). The whole of the area was included in the North-East Development Area. The Teesside Industrial Development Board was formed in 1945 to promote investment in the area and set up new industrial estates (alongside the North-East Industrial Development Association, which did the same for the whole of the North-East) (Cousins et al., 1974; North, 1975). These measures had the unintended effect however of reinforcing the dependency of the area on heavy industry, rather than countering it (also see Hall, 1986).

By the late 1950s Tees Valley was still one of the leading production centres in the UK (with South Wales) (House and Fullerton, 1960). However, the competitiveness of iron and steelmaking was still further eroded in 1950s and 1960s. Complacency in the boom-period in the 1950s, controls on new investment by the Iron and Steel Board, and uncertainty over renationalisation, meant that not enough was invested in the application of new technologies, like basic oxygen steel-making (BOS) (Blair, 1997). In 1967, the Labour-government under Harold Wilson, which had assumed office in 1964, renationalised the fourteen largest steel companies in the United Kingdom (among which Dorman Long and South Durham) to form the British Steel Corporation (BSC). The strategy of BSC became to concentrate investment in five 'heritage sites' on coastal locations, including Tees Valley. In the 1973 it was officially announced that a massive, new integrated works was to be constructed near Redcar which would triple total capacity for crude steel production in the area by the 1980s (Secretary of State for Trade and Industry, 1973). These facilities would replace much of the older plants in other locations (to the east of Middlesbrough, in the Ironmaster's District, and in Hartlepool).

Chemicals production flourished in the first decades following the Second World War. ICI continued to develop and expand rapidly in the area, both at its existing complex in Billingham and at its new petrochemical complex at Wilton (which focussed on e.g. plastics, synthetic rubbers, paints, adhesives, and nylon). Demand for ICI's products continued to be high, and the company was one of the technological leaders in the field. By the late 1950, Tees Valley had become one of the most important sites in the world for production and R&D in chemicals (Beynon et al., 1986; Greco, 2002). This meant large investments in further expansion of capacity, and in the application of new product- and process-innovations in both Billingham and Wilton (North, 1975; Beynon et al., 1986; Greco, 2002). In the 1960s, also an area of marsh land on the north bank of Tees, at Seal Sands, was drained and prepared for the development of a third branch to the chemical complex in the area. A refinery was established in 1966 as a joint venture between ICI and Phillips Petroleum; and several other large chemical firms (mainly from the US) constructed branch plants on Seal Sands. Also Shell built a refinery, opposite to Seal Sands on the south bank of the Tees. The discovery of North Sea oil and gas in the latter half of the 1960s gave a further boost to the developments at Seal Sands and chemicals production more generally.

Meanwhile shipbuilding in Tees Valley suffered from a drop in demand after the initial post-war boom. Several shipyards closed in Hartlepool and along the river in the 1960s, while others were taken over by the Tyneside-based Swan Hunter group. The decline of shipbuilding, as well as the decline in demand for railway equipment, meant that also the engineering industry had to adjust. The large investments in chemical and iron and steel plant in the area, the emerging offshore industry, and the development of new power plants, offered some new opportunities. Many of the engineering firms became however part of larger consortia, also to be able to compete at the international level (North, 1975).

In the early and mid-1960s, a broad consensus emerged about the further development of the area, which included the central government, local authorities, regional bodies<sup>1</sup> (all with representatives from both the Labour and Conservative Parties), major employers (in particular British Steel Corporation and ICI), and the trade unions (Foord et al., 1985; Beynon et al., 1989; Hudson, 1990; Beynon et al., 1994). They embraced a programme consisting of three main strands: the modernisation and rationalisation of existing heavy industry, expansion of the area's infrastructure and provision of industrial land, and the attraction of new employment in light manufacturing and services (as it was foreseen that employment in heavy industry would go down somewhat). As a result of this programme, the investments by BSC and ICI in the area were supported by generous grants from the central government; and were furthermore complemented by large amounts of public

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<sup>1</sup> The North-East Development Council and the Northern Economic Planning Council.

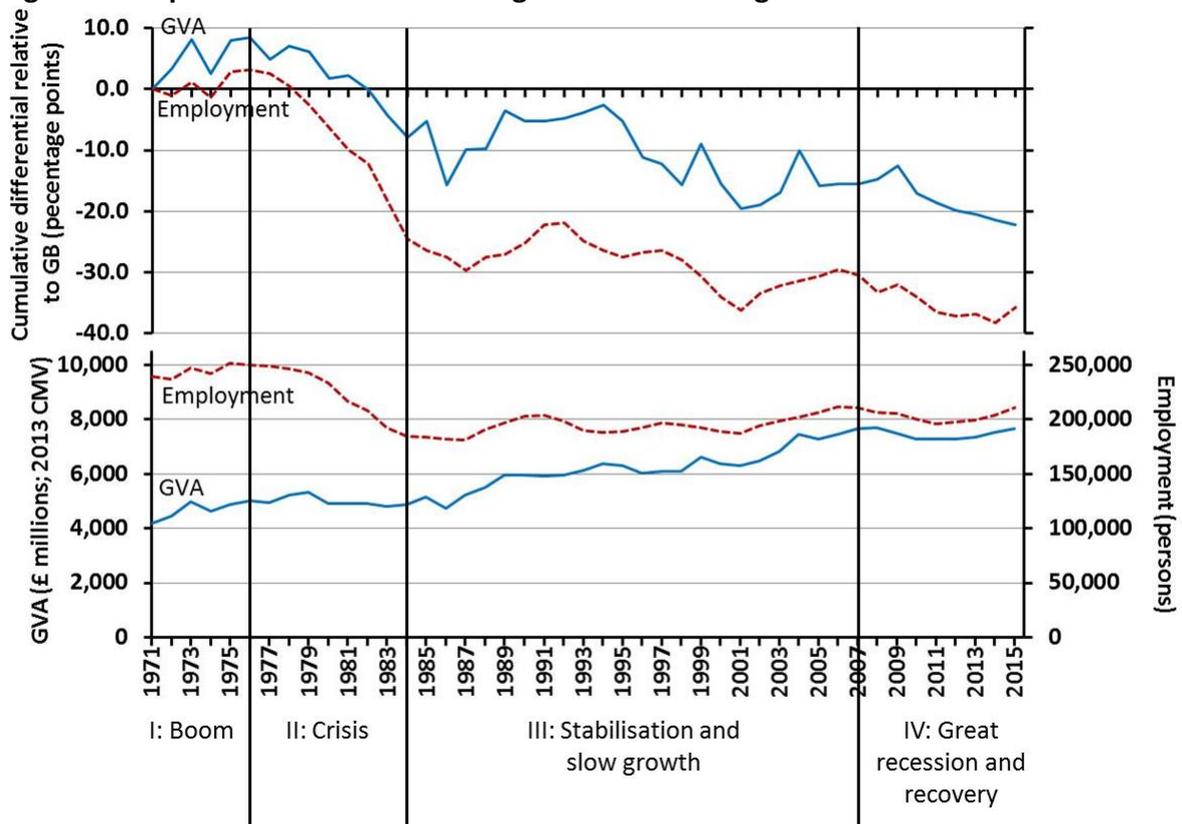
investment. Public investments included the land reclamation of Seal Sands (already referred to above), construction of the new Tees Dock (in the early 1960s), building a nuclear power station close to Hartlepool (in the late 1960s), and development of a regional airport (reconverted from an old RAF-base in 1964).

Hence in the early 1970s considerable optimism existed about the economic future of Middlesbrough and Stockton, and the wider Tees Valley. And on the face of it, the area appeared a very dynamic place, with a boom in new investment and construction in iron and steel, chemicals, new land reclamation, and infrastructure. However, also in the 1960s several strategic parameters had shifted to the disadvantage of the area. Firstly, with the gradual dismantling of the industrial complex of the North-East (as a result of the decline of coal mining and ship building), the steady demand for the products of the area (especially iron and steel) in the region itself, was disappearing. Hence demand for the area's products could now only be found on markets further afield, which would also be exposed to strong international competition (even more so after the United Kingdom joined the European Economic Community in 1973). The chemical industry in the area did indeed seem to be in a strong situation in the early 1970s; but whether the iron and steel industry, heavy engineering, and other manufacturing in the area would continue to experience strong demand and would be sufficiently competitive, was uncertain. Secondly, more and more control of economic development shifted from the local level to the national level and even international level. The large firms in iron and steel, but also in engineering and shipbuilding, became part of even larger firms, with their headquarters outside the area. Much of the manufacturing was now characterised by branch plants of national or international firms. Furthermore, the central government had acquired a growing influence in heavy industries such as iron and steel (but also coal mining and shipbuilding), and had developed an increasing interest in the area itself, as a strategically important location for national economic interests.

### 3 Economic change since the 1970s

In the 1970s there was much investment and construction activity in Middlesbrough, Stockton and their surrounding area. However, employment levels in steel and chemicals were already dropping somewhat. The steel crisis from 1975 until the mid-1980s hit the area hard, and also other manufacturing industries experienced problems from the early 1980s onward. Deindustrialisation was particularly rapid and disruptive in the area; and the local economy experienced a severe crisis (both in absolute and relative terms). The first signs of this crisis were visible in 1976 and it lasted until about 1984, when the economy finally stabilised again. After that the economy of the area went through a long period of moderate growth, until 2007. The area's economy has not dealt with the recent recession as well as other parts of Britain, but has now more or less recovered. These four episodes of economic change are depicted in Figure 5.

**Figure 5 Episodes of economic change in Middlesbrough and Stockton TTWA**

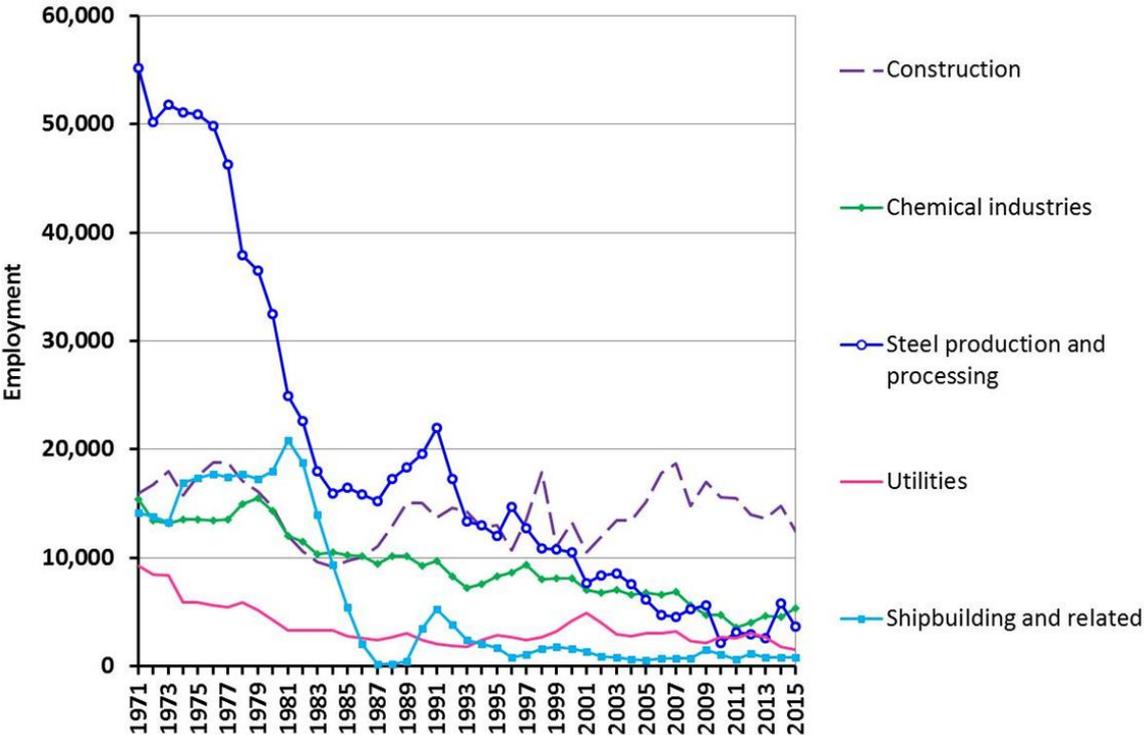


Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

Figure 6 shows the development of employment in key industries. Losses in employment in the steel industry already started in the late 1960s, but accelerated rapidly during the steel crisis of the late 1970s and early 1980s. From 1976 until 1984 more than 2/3 of employment in steel was lost (about 35,000 jobs). Since then, decline has been less rapid,

but quite consistent. Decline in shipbuilding and related industries has been equally rapid, with the sector going from around 18,000 jobs to near 0 in just 5 years between 1982 and 1987. Job loss in the chemical industries proceeded more gradually. In 2015 it still directly sustained about 5,000 jobs. The end of the building boom and the crisis in heavy industry in the area, also affected the construction and utilities sectors; these had a strong presence in the area in the 1970s; but employment in these sectors has slowly eroded (although employment in construction did recover after a slump in the late 1970s and first half of the 1980s).

**Figure 6 Development in employment in key industries in Middlesbrough and Stockton TTWA**



Source: Cambridge Econometrics data, constructed as part of the ESRC ‘Structural Transformation, Adaptability, and City Economic Evolutions’-project.

As mentioned, British Steel in consultation with the Ministry of Trade and Industry, designated Redcar in Tees Valley as one of the five coastal locations which were to become the main centres of steel production in the early 1970s. Other locations for steel production in the UK were scheduled to be closed or downsized considerably during the next decade. The new integrated works would also replace the existing iron and steel production plants in the area; but some rolling mill and processing capacity would remain at various other locations in the area. Hence some substantial job loss was projected to take place in any case. The steel crisis – driven by lack of demand for steel, significant overcapacity, and competition by more cost-effective producers from Asia – exacerbated this. And employment losses intensified still further, when the incoming Conservative

government threatened to terminate financial support for the British Steel Corporation in the early 1980s, which led to further restructuring and downsizing. Moreover, as a result of the steel crisis the building of the new plant in Redcar was truncated, and the last phases of its construction were never realised (Hudson and Sadler, 1985). This has left the operations in an economically and technologically disadvantaged position, as iron and steel-making capacity at the works exceeded rolling mill capacity. So a large part of the output of the plant is semi-finished steel (British Steel General Steels, 1990; Hudson and Swanton, 2012), for which demand is more volatile and the margins are much lower. This eventually resulted in further crises in the early 2000s, and 2010-2011; and to closure of the plant in 2015.

In chemicals, large investments in the 1970s in Billingham, Wilton, and Seal Sands, did not lead to any additional employment. Instead, efficiency gains as a result of these investments led to a small decrease in employment. From about 1980 onwards, Tees Valley started to lose significance as a location for chemical industry; this trend further accelerated in the 1990s and 2000s. From the early 1980s ICI shifted its strategy from being a diversified chemical company, producing a full range of chemicals, to becoming a chemical company specialising in more high-margin commodity chemicals and pharmaceuticals (Greco, 2002; Phillips, 2011). This was in response to increasing overcapacities in the global production of heavy chemicals (such as petrochemicals), developed in the 1970s (Beynon et al., 1986; Greco, 2002). For ICI's integrated complex in Tees Valley this meant a series of sell-offs and closures over the 1980s, 1990s and 2000s (Greco, 2002; Chapman, 2005). Leading up to 2008 – when ICI ceased to exist as a separate company altogether – the area had become more and more peripheral within its operations. Moreover, ownership of different parts of the complex has become increasingly dispersed among a multitude of companies, mostly from outside the United Kingdom. Currently, the chemical industry thus consists mostly of branch plants of large international chemical firms, and managing the mutual dependencies between different parts of the complex has become a growing concern (Chapman, 2005).

In engineering there was some growth in employment in the first part of the 1970s (Robinson and Storey, 1981), as many of the larger companies were involved in the new investment in plants in the steel and the chemicals industries, and moreover, as the exploitation of North Sea oil and gas, provided new opportunities in offshore engineering (Sadler, 1986). However, by the early 1980s also engineering started to shed jobs (Storey, 1985), when the boom of investments in Tees Valley ended, and a fall in oil prices in the 1980s led to a decrease in investments in offshore engineering equipment (Sadler, 1986). Though many production activities in engineering have disappeared over the years, a core of expertise in civil and mechanical engineering has been retained: several firms still operate in the area, offering design and consultancy services in engineering around the world (Hudson, 2011). Thus engineering is no longer a major employer in the area; but a legacy of several thousands of comparatively high value-added jobs, remains.

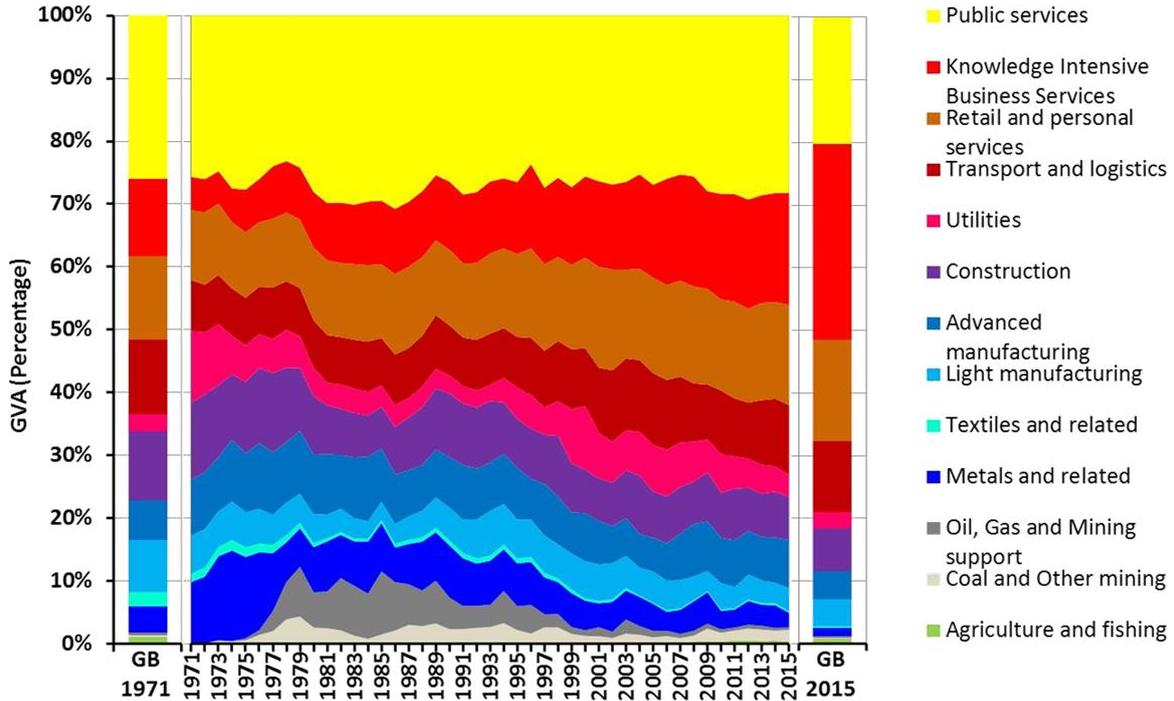
The decline of the steel industry, chemicals, other manufacturing industries, as well as utilities and construction is also clearly visible in Figures 7 and 8, which depict structural change in Middlesbrough and Stockton TTWA (in terms of GVA and employment respectively). As is clear from these figures, structural change is much more marked in terms of employment than in terms of GVA; i.e. employment shares of the various sectors in the local economy have changed much more in the period than the output shares. Furthermore, these figures show that the area was considerably more industrialised compared to Britain as a whole; and that the area actually experienced some further industrialisation in the early 1970s. There were actually some gains in employment in other forms of manufacturing (such as the food industry and textiles) in the late 1960s and early 1970s, but these were not sustained in the second part of the 1970s (Robinson and Storey, 1981; Storey, 1985). Deindustrialisation (especially in terms of employment) was very rapid between the mid 1970s and the mid 1980s. The service sector as a share of the economy gained ground in relative terms. A part of this can also be explained by the outsourcing of services such as cleaning, catering, maintenance and certain engineering services, by the large firms (ICI and BSC) in the 1980s and 1990s (Greco, 2002). Most of the growth in the service sector has however come from activities which do not rely on the old manufacturing base, such as retail, back-office and call-centre services, health care, and other public sector services (Beynon et al., 1994; Tees Valley Joint Strategy Unit, 2002), as will be discussed in the next Chapter.

As a consequence of the very profound structural changes in the area's economy, it now has a much more similar make-up as the British economy as a whole. Nonetheless it should be noted that the area still has comparatively more manufacturing, and significantly less presence of Knowledge Intensive Business Services, while public services appear to be overrepresented. This overall convergence is also apparent in the decline of the Krugman Specialisation Index – visible in Figure 9 – which indicates that the specialisation of the area's economy compared to the economy of the nation as a whole has decreased.<sup>2</sup>

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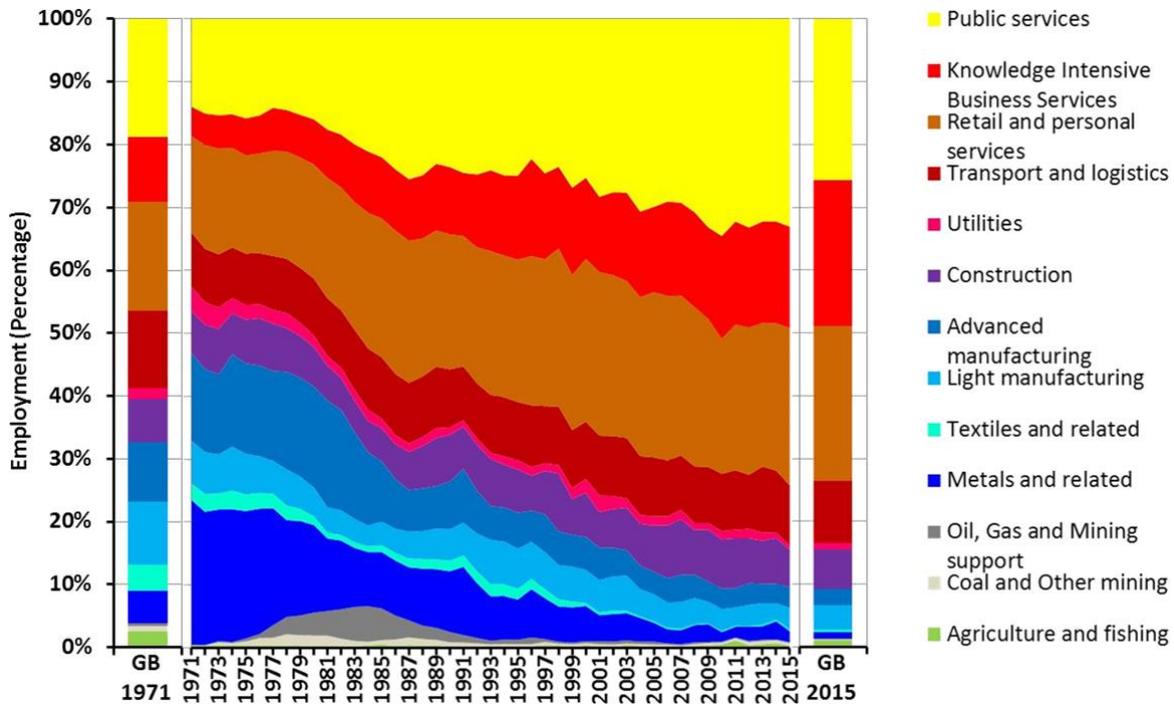
<sup>2</sup> Because of the more marked changes in economic structure in terms of employment compared to output, the drop in the Krugman Specialisation Index is also more pronounced in terms of employment than in terms of output.

**Figure 7 Structural change in Middlesbrough and Stockton TTWA in terms of GVA**



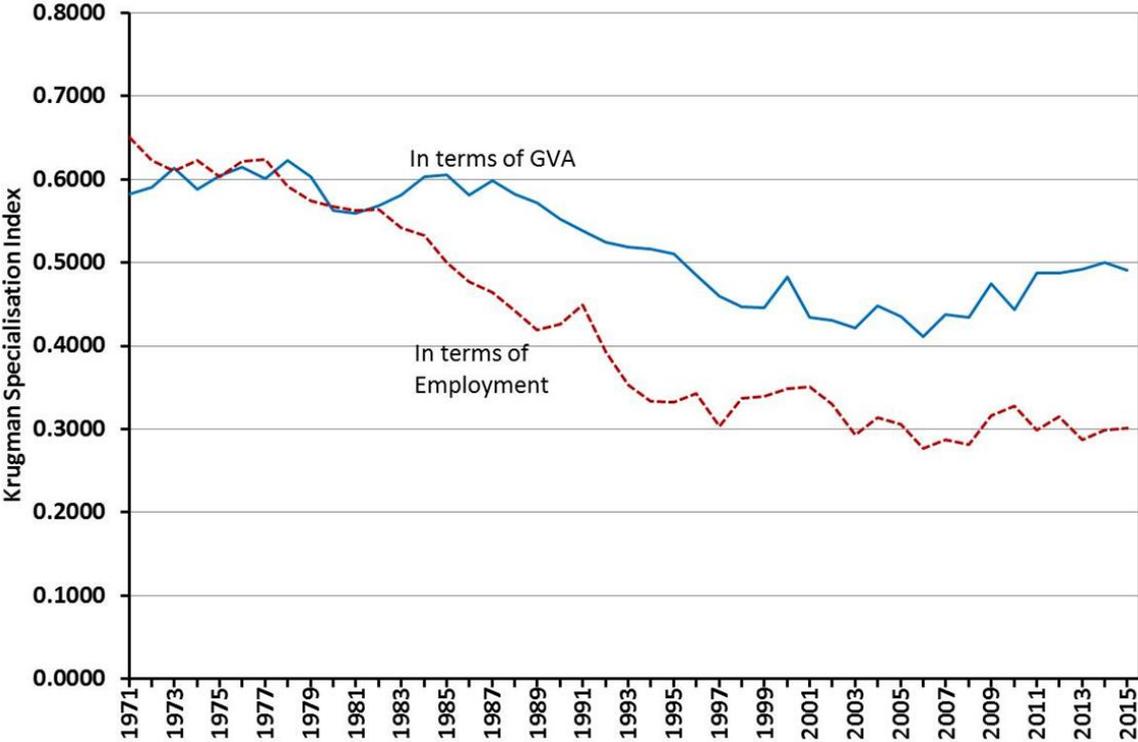
Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

**Figure 8 Structural change in Middlesbrough and Stockton TTWA in terms of employment**



Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

**Figure 9 Development of Krugman Specialisation Index for economic structure in Middlesbrough and Stockton TTWA**



Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

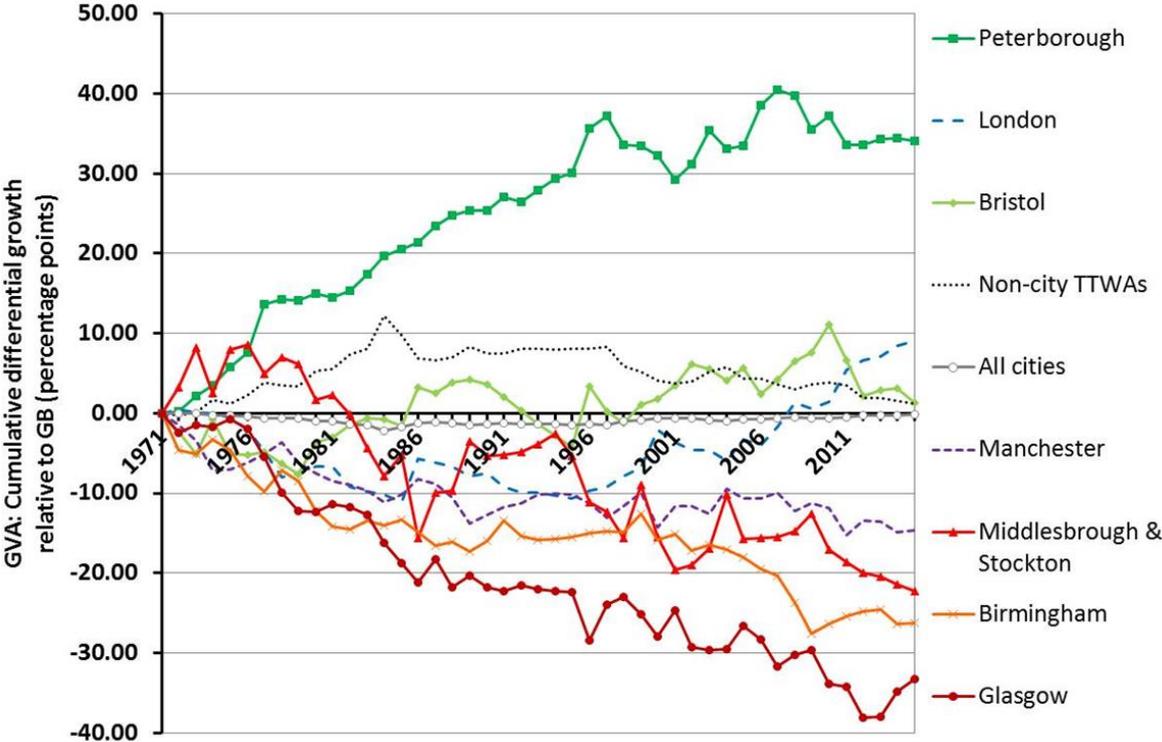
# 4 Analysis of economic performance and adaptation

In this Chapter, the economic performance of the Middlesbrough and Stockton area since 1971 according to a number of indicators, is discussed. Subsequently, the adaptation processes to economic change in three key domains are analysed: the economic base, the labour market and the spatial structure. This analysis will set up the assessment of the impact of institutions and policies on the economic development of the area since the 1970s, in Chapter 7.

## 4.1 Overall economic performance

After the boom in the late 1960s and first half of the 1970s, and the subsequent bust in late 1970s and early 1980s, growth of the Middlesbrough and Stockton economy in terms of output has been relatively weak, as is clear from Figure 10. Except for the period until 1976, the rate of growth has normally been below the national rate, and as yet there are no signs of ‘a turn-around’. But although the performance in terms of GVA has been lagging, it is nevertheless on a par with many other old industrial cities, and actually better than Birmingham and Glasgow.

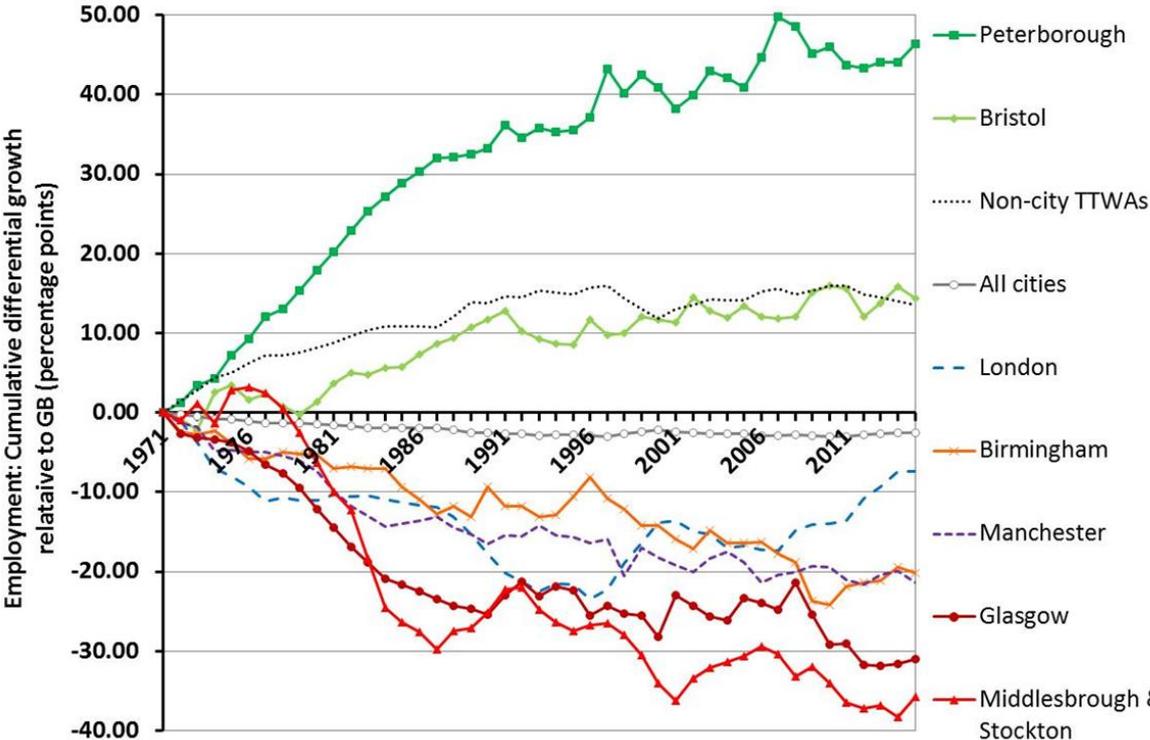
**Figure 10 Cumulative differential growth of GVA (2013 Current Market Value) of selected cities relative to Great Britain from 1971 until 2015**



Source: Cambridge Econometrics data, constructed as part of the ESRC ‘Structural Transformation, Adaptability, and City Economic Evolutions’-project.

Figure 11 shows that the performance in terms of employment has been really poor however, also in comparison to other cities which suffered badly from deindustrialisation. The economy of the area seems to have experienced more rapid employment loss than most other cities in the late 1970s and first half of the 1980s, and also since then employment growth has normally been somewhat below the national average (but performance has been quite similar to Birmingham, Glasgow, and Manchester since the mid-1980s).

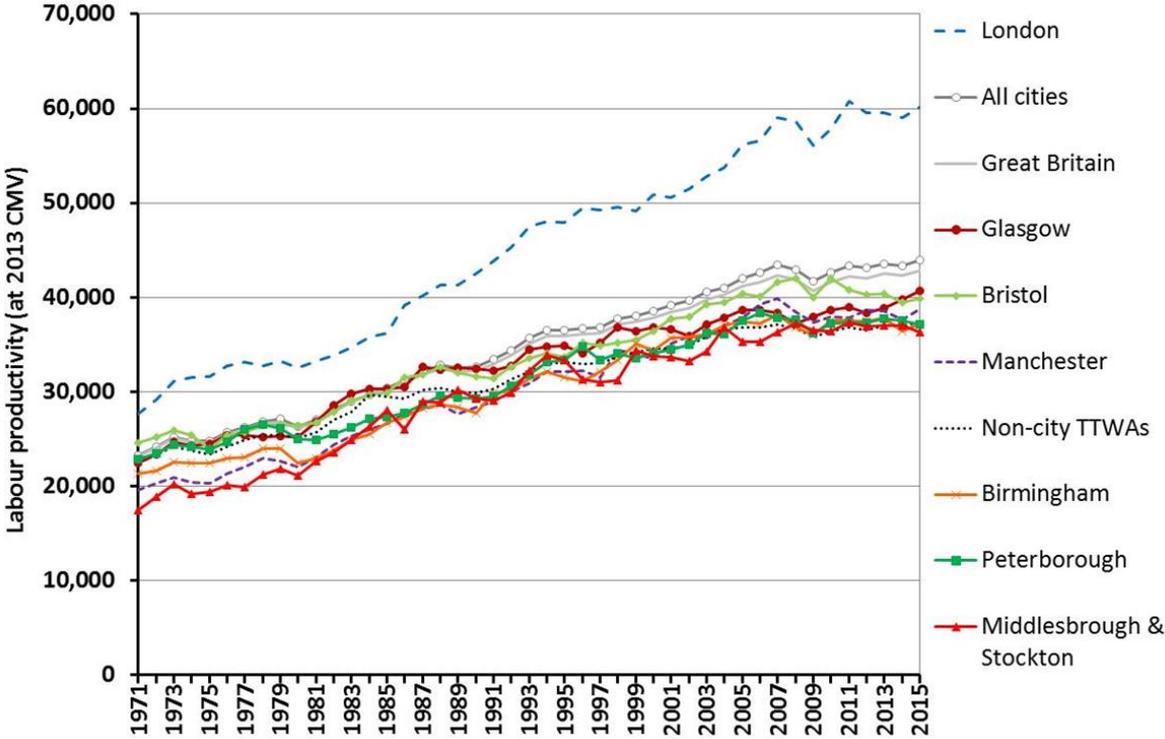
**Figure 11 Cumulative differential growth of total employment of selected cities relative to Great Britain from 1971 until 2015**



Source: Cambridge Econometrics data, constructed as part of the ESRC ‘Structural Transformation, Adaptability, and City Economic Evolutions’-project.

As a result of the somewhat better performance in terms of output compared to employment, overall labour productivity has improved over time in Middlesbrough and Stockton. As shown in Figure 12 below, the level of labour productivity in the area has converged somewhat with levels in other cities. Especially from the early 1980s until the early 1990s there have been strong improvements, but growth has been levelling off since. The productivity level for the area is nevertheless still at a lower level than most other cities.

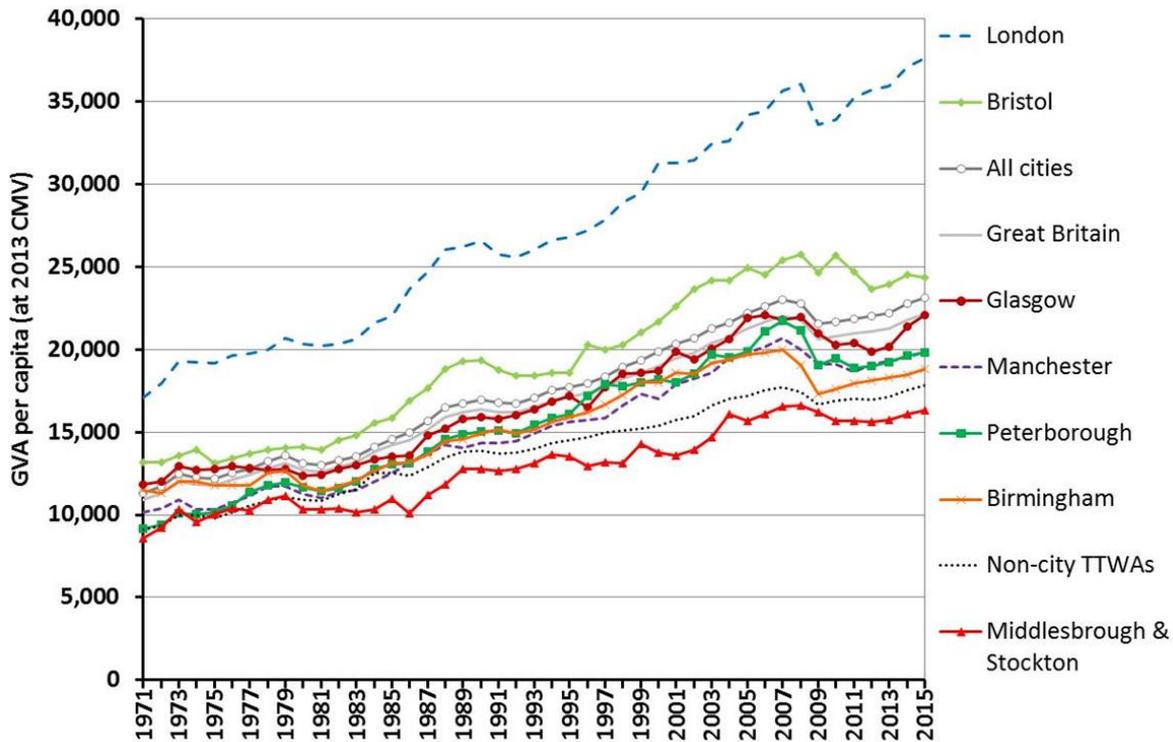
**Figure 12 Development of labour productivity levels (GVA / employee at 2013 Current Market Value) of selected cities from 1971 until 2015**



Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

As exhibited in Figure 13, improvements in labour productivity are however not really reflected in a higher GVA per capita. This is because economic activity rates remain relatively low in the area. The area is thus clearly trailing behind other cities in terms of GVA per capita, and the area has been performing worse than other cities on this indicator, especially since the late 1970s.

**Figure 13 Development of GVA per capita (at 2013 Current Market Value) of selected cities from 1971 until 2015**

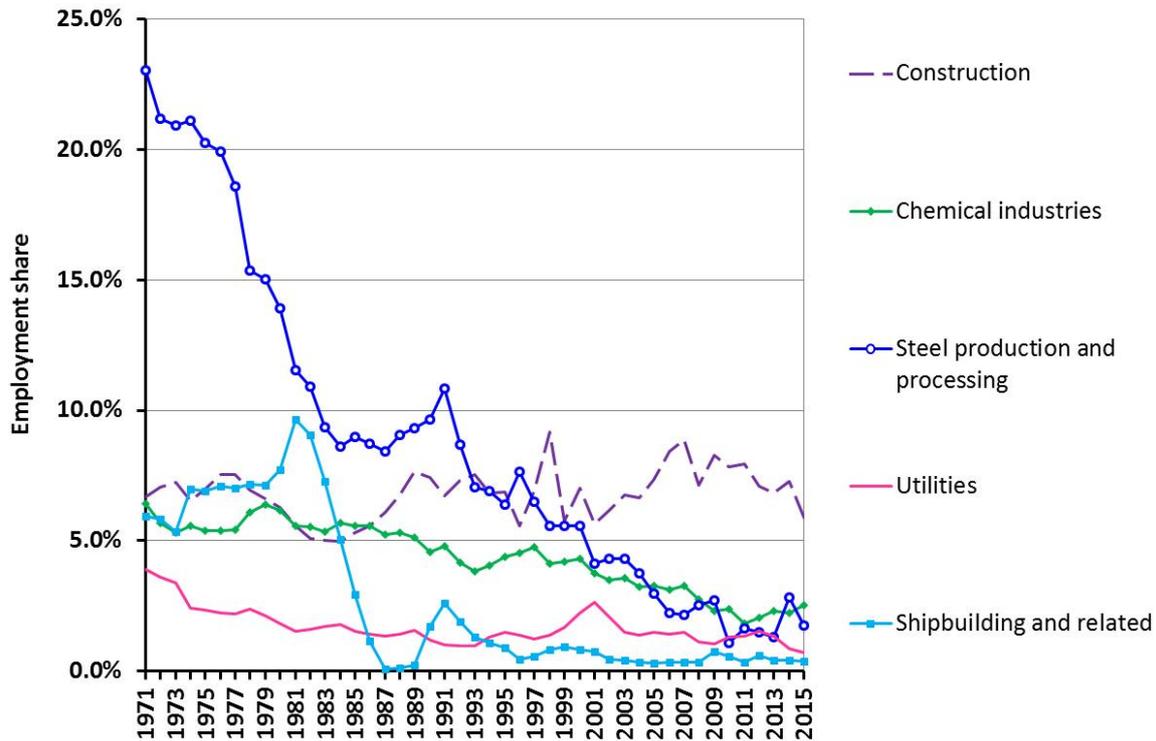


Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

## 4.2 Adaptation in economic base

Figure 14 displays the declining employment shares of the historic mainstays of the economy in Middlesbrough and Stockton. Employment in steel production and steel processing has fallen quite dramatically, as already discussed. The blast furnace and steel-making facilities in Redcar have closed in 2015; but there is still some steel processing taking place at various locations in the area. The loss of employment in the chemical industries has been much more gradual; and the area is still an significant centre for chemical production. In fact, chemicals, together with the remnants of the steel industry and heavy engineering, now form the 'process industry cluster', which remains important in terms of GVA and as driver for other parts of the economy (but no longer provides that much direct employment). Over the years, there has been some branching out in related industries such as renewable energy, pharmaceuticals, biotechnology, biofuels, renewable materials, etc. (NEPIC, 2013). Furthermore, after the demise of ICI in the area in the 1990s, institutions have developed to bring the various firms within the cluster together (such as NEPIC, and its predecessors). However, the cluster consists mostly of 'branch plants', which do not have significant head office functions in the area (Chapman, 2005); hence strategic decisions (on future investments or expansion / closure of facilities) are typically not made in the area.

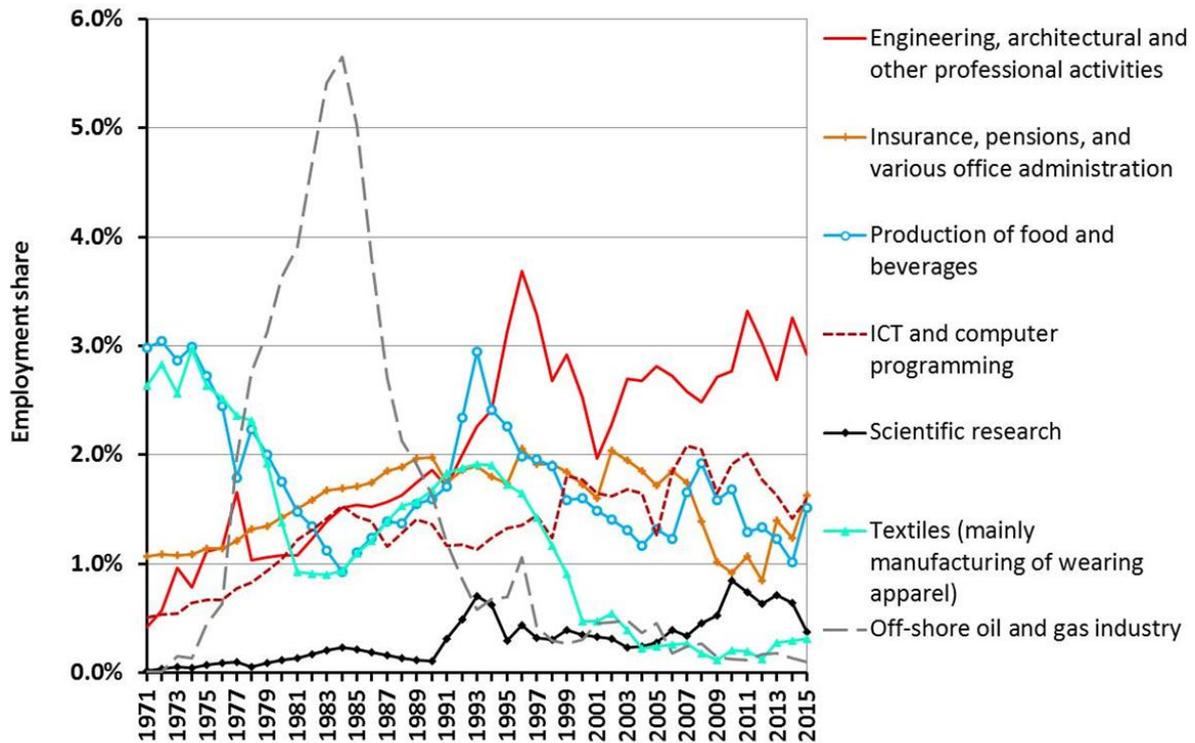
**Figure 14 Development of employment shares of historic mainstays of economy in Middlesbrough and Stockton TTWA**



Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

Figure 15 shows the development of employment shares of several projected and actual growth sectors in the area's economy. There were efforts to attract other forms of manufacturing in the 1970s and 1980s, and these efforts had a moderate level of success in e.g. food and textiles. The production of wearing apparel has however more or less disappeared from the area; whereas food processing still has a comparatively strong presence. In the second half of the 1970s and first half of the 1980s, the area furthermore benefitted from a boom in the off-shore oil and gas industry, which provided considerable new employment opportunities then. There is still offshore activity in the area, but employment has dropped considerably. In the service sector, there has been some growth in low-end business services, related to insurance / pensions and other office administration (mainly back-office activities and call centres) (also see Tees Valley Unlimited, 2013). But since the early 2000s, the share employment growth in this segment of the economy seems to be declining again. Instead there are strengths emerging in especially engineering, technical consultancy and other professions, and to a lesser extent in IT and digital media, and in scientific research (on the back of the expansion of the higher education sector in the area since the early 1990s).

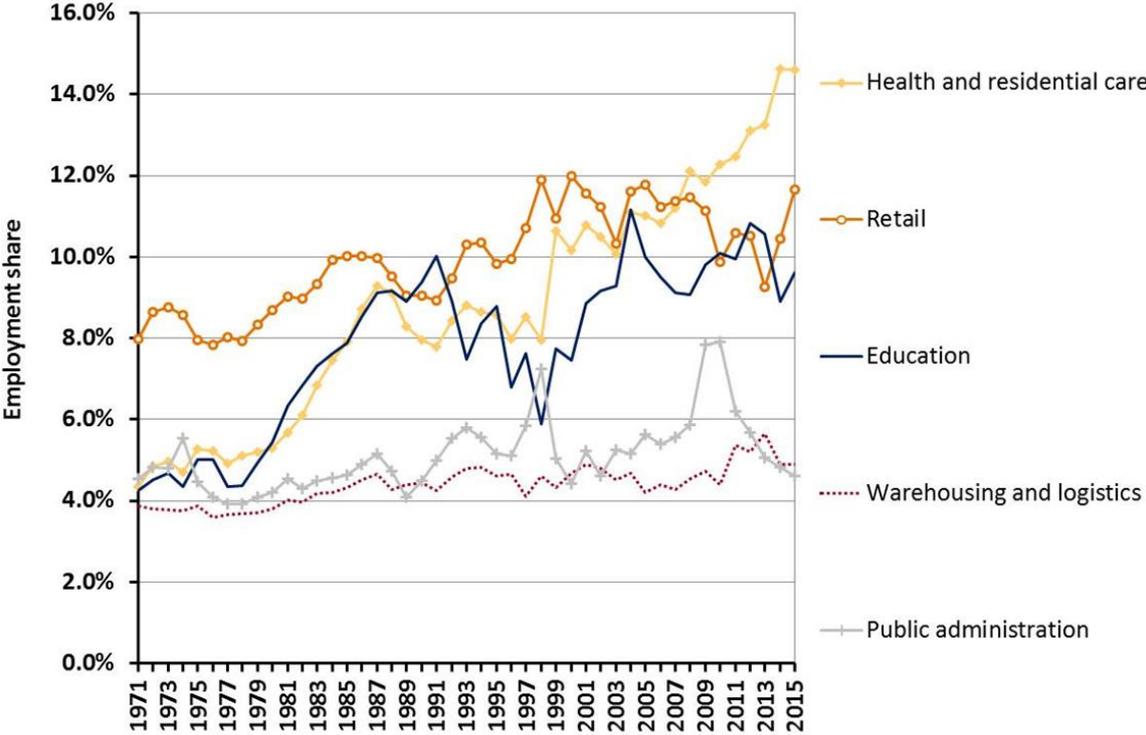
**Figure 15 Development of employment shares of several projected and actual growth sectors in Middlesbrough and Stockton TTWA**



Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

As is clear from Figure 16, by far the strongest growth in employment over the years has been in the public sector. In particular in health and residential care – with about 20,000 new jobs added over the entire period – and education – with an increase of about 10,000 jobs (public administration has not really increased its employment share). Also retail has shown moderate growth and has gradually increased its employment share. Warehousing and logistics have a relatively strong presence in the area and provide for about 10,000 jobs. Port facilities (through Teesport) have been expanded over the years, and Tees Valley now acts as a logistic hub between Continental Europe, and the North of England / Scotland.

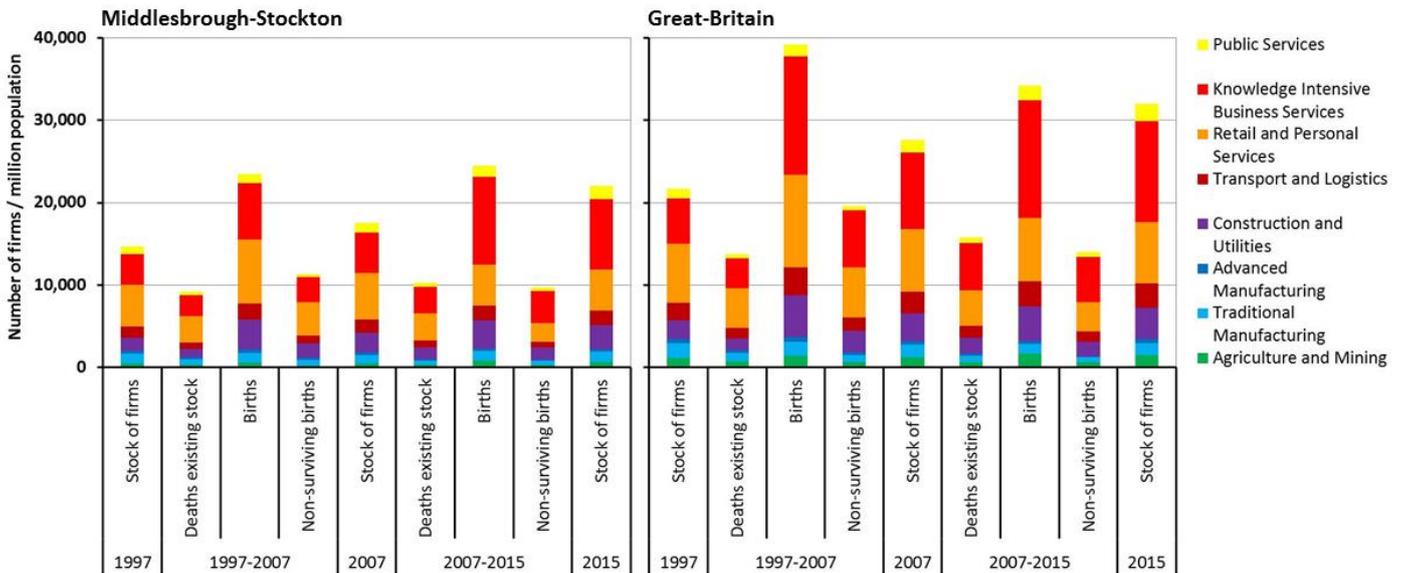
**Figure 16 Development of employment shares of several key sectors for employment in Middlesbrough and Stockton TTWA**



Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

Some profound shifts have thus taken place in the industrial make-up of the economy in Middlesbrough and Stockton. Nevertheless, the dynamism of the economy in Middlesbrough and Stockton has been moderately low since the late 1990s. In terms of firm-dynamics, the area's economy has been less dynamic than the national average, as is evident from Figure 17. Although it should be noted that the number of firm births has picked up in the most recent period from 2007 until 2015, and birth- and death rates are now at comparable levels as the nation as a whole. Moreover, there has also been a shift to more new firm-growth in Knowledge Intensive Business Services, and less in retail and personal services (compared to the earlier period of 1997-2007).

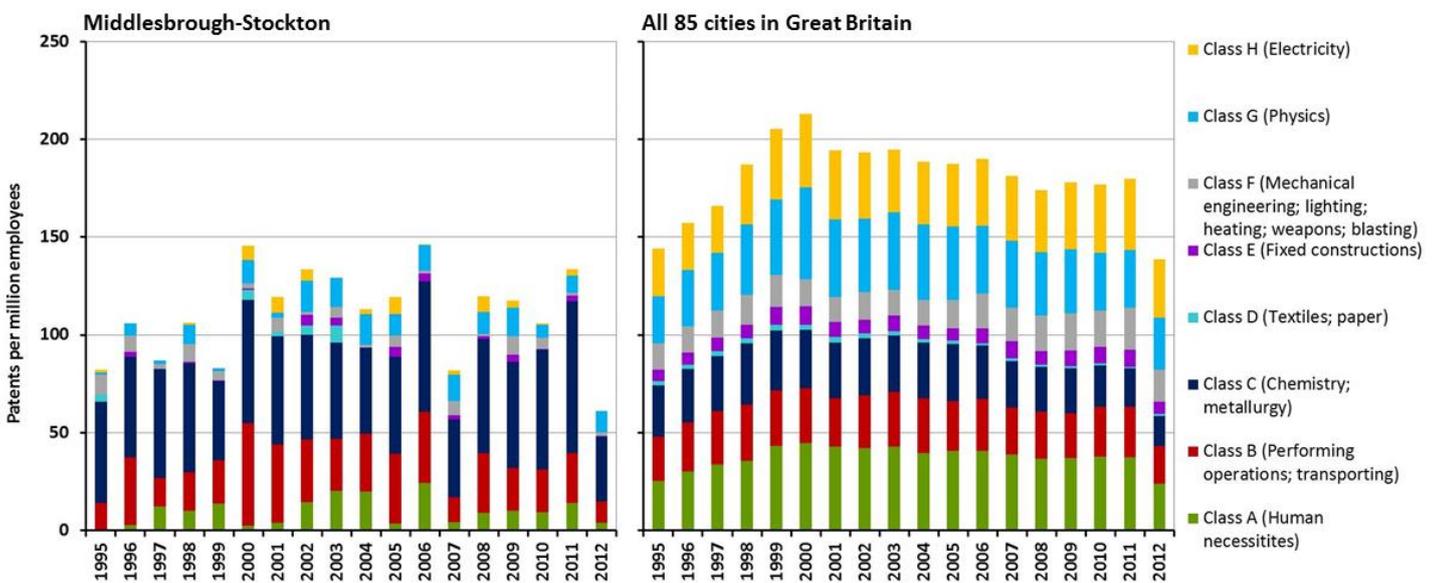
**Figure 17 Firm-dynamics per million inhabitants (average population over period) in Middlesbrough and Stockton TTWA and Great Britain from 1997 until 2015**



Source: Enterprise Research Centre data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

Also in terms of patenting activity, Middlesbrough and Stockton TTWA lags behind other cities, with a consistently lower rate of patents per million employees in the period from 1995 until 2012 (see Figure 18). However, it should be noted that in patents with regard to 'Chemistry and Metallurgy' (Class C) the area is performing very strongly; and also in 'Performing operations and Transporting' (Class B) patenting is at a comparable level as the average for all cities.

**Figure 18 Patents per million employees in Middlesbrough and Stockton TTWA and in 85 largest TTWAs in Great Britain from 1995 until 2012**

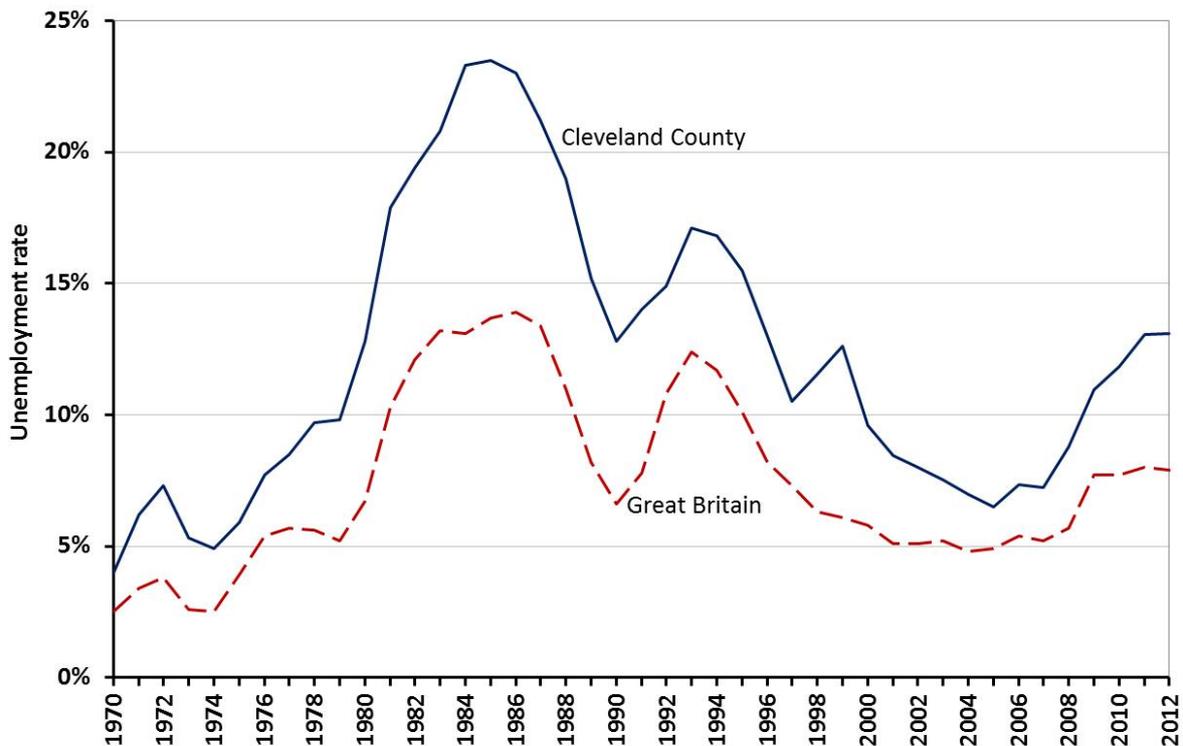


Source: Eurstat.

### 4.3 Adaptation in labour market

As a result of the extensive job losses in heavy industry, other manufacturing and construction, unemployment in the area rose dramatically from the mid-1970s until the mid-1980s, reaching a peak of about 24% in 1985. This is exhibited in Figure 19. By then Cleveland County was the county with the highest rates of unemployment on mainland Britain (only surpassed by parts of Northern Ireland) (Beynon et al., 1985; Foord et al., 1985). In some parts of the area unemployment even exceeded 40% (Foord et al., 1985). Also currently, the economic activity rate is lower than elsewhere, and there remains a comparatively large pool of inactive and low-skilled people in the area with few prospects.

**Figure 19 Unemployment rate in Cleveland County and Great Britain from 1970 until 2012**



Changes in definition of unemployment, not taken into account. Figures for Cleveland County / Teesside from 2004 onwards, are calculated from unemployment figures for Middlesbrough, Stockton-on-Tees, Hartlepool, and Redcar and Cleveland.

Sources: Cleveland County Council (1995), Office for National Statistics (Regional Trends), NOMIS ([www.nomisweb.co.uk](http://www.nomisweb.co.uk))

A further characteristic of the development of the labour market, has been the growing flexibilisation. The tacit pact between employees and employers, of job security and relatively high wages in return for a cooperative attitude and harmony in industrial relations, has broken down for large parts of the workforce (also Warren, 2018). Hence there has been a much higher incidence of temporary contracts and part-time work (especially among women), less demarcation of responsibilities and more 'multitasking',

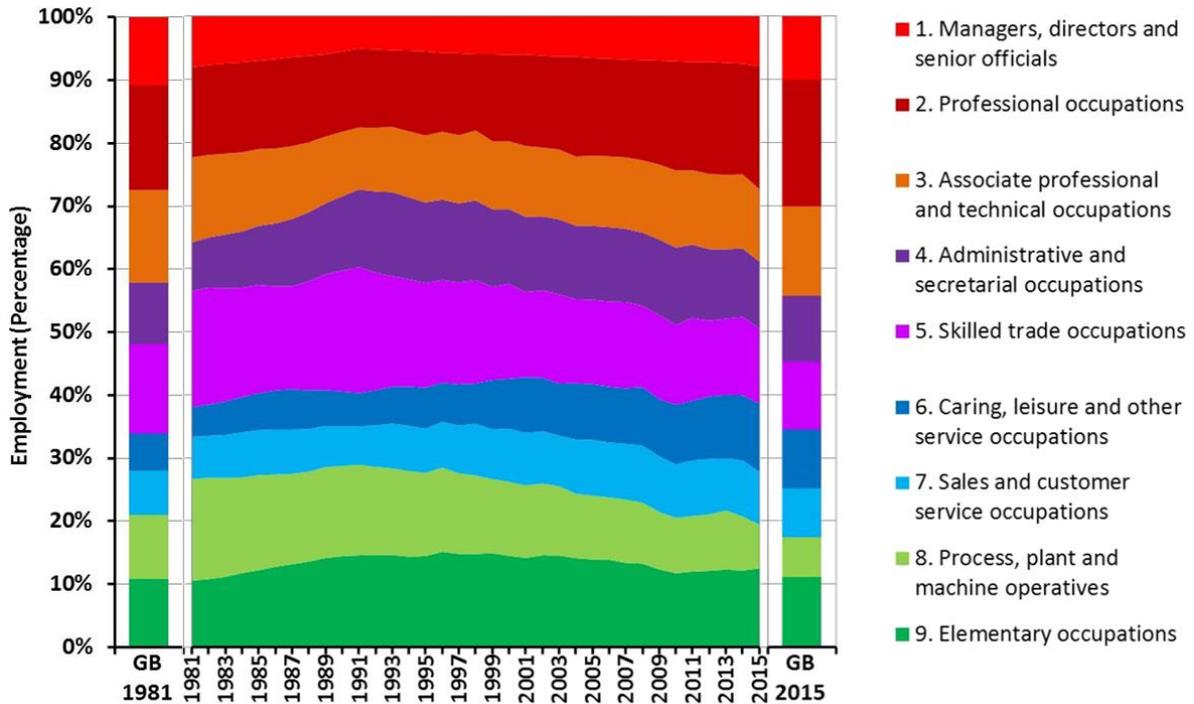
and a growing control of management on the way work is performed (together with a declining influence of trade unions). At the time of mass unemployment in the 1980s, also the informal economy – in which jobs were performed off the books – was sizeable in the area. (Beynon et al., 1985; Beynon et al., 1994)

The high levels of unemployment experienced in the area in the 1980s, have led to a considerable amount of people leaving the area, in search of opportunities elsewhere. Some moved to other parts of the United Kingdom. Others took on contract work in chemicals, engineering and construction in e.g. the Middle East (Foord et al., 1985; Beynon et al., 1989). There is still a continuing outmigration of 'higher achievers' from the area (Chapman et al., 2007). The area has thus lost a substantial part of its existing skill-base during the 1980s, through both outmigration as well as the devalorisation of skills.

Nevertheless, the percentage of people with no qualifications has dropped, and is now only slightly higher than in other parts of Great Britain (whereas it used to be much higher). The percentage of people with qualifications at NVQ4-level or higher (degree-level equivalent or higher) has increased from around 10% in 1990 to about 28% currently, but is still lower than the rest of Great Britain, where it is at about 35%. (Statistics from ONS Census 1991 and NOMIS Annual Population Survey 2014).

Figure 20 depicts the development of the occupational structure in the active labour force since 1981. Especially more lower-level service occupations (levels 6 and 7) appear to be overrepresented compared to the national average, and seem to have replaced high- and low-skilled manufacturing occupations over time. Managerial and professional occupations are clearly underrepresented in the area, although professional occupations have been growing as a share since the early 1990s. The relatively poorer quality of the job offer seems to perpetuate an overall 'low skills equilibrium' in the area's labour market (also see Finegold and Soskice, 1988; Dawley et al., 2014): a lack of investment in education and training, and low aspirations among younger people (Chapman et al., 2007; Tees Valley Unlimited, 2010).

**Figure 20 Development of occupational structure in Middlesbrough and Stockton TTWA from 1981 until 2015**

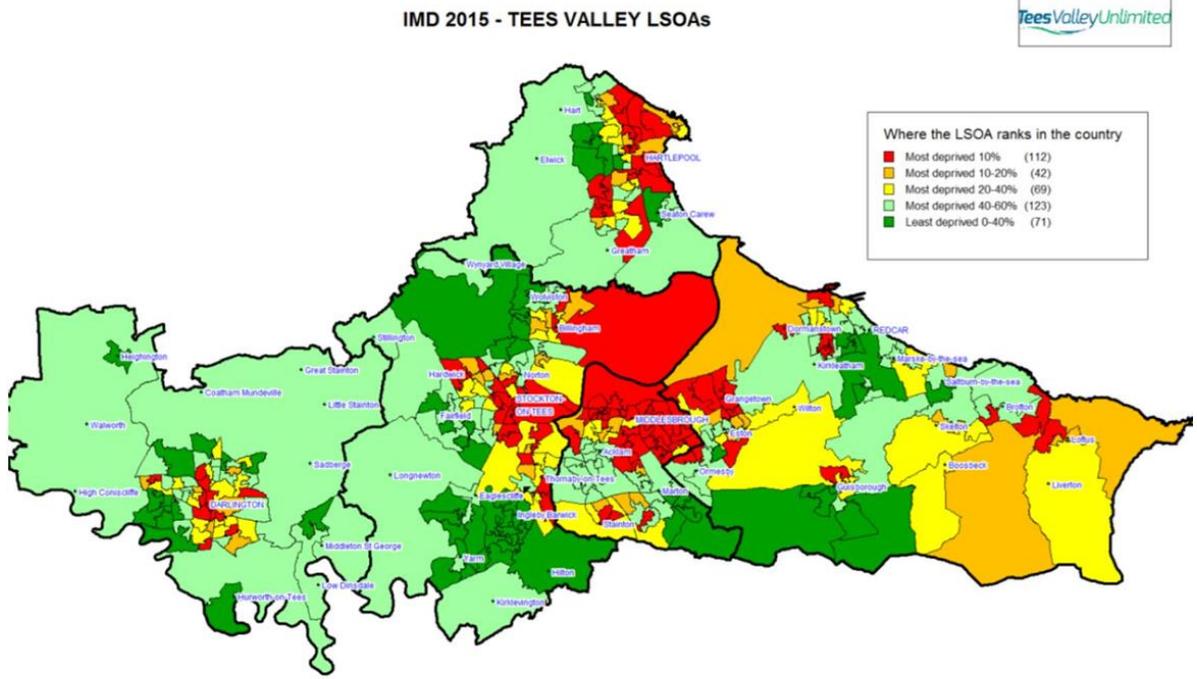


Source: Cambridge Econometrics data, constructed as part of the ESRC 'Structural Transformation, Adaptability, and City Economic Evolutions'-project.

#### 4.4 Adaptation in spatial structure

There have been notable improvements in the reduction of environmental pollution and degradation, and in the availability of amenities in the area. Nonetheless, there are still many derelict – and sometimes contaminated – old industrial sites (Tees Valley Unlimited, 2010). Furthermore, the housing stock is relatively dated and lacks variety, as there is a high proportion of pre-war, terraced housing (Tees Valley Unlimited, 2010). Also public transport connections within the conurbation are in clear need of improvement. The main towns in the area are generally not considered attractive (as evidenced by e.g. The Economist, 2013; The Guardian, 2014; also Warren, 2018 (esp. Chapter 4)). Large parts of especially Middlesbrough, Stockton and Hartlepool, still count among the most deprived of the country, according to the Index of Multiple Deprivation 2015, as can be seen from Figure 21.

**Figure 21 National ranking of Lower Super Output Areas in the Tees Valley area on the ONS Index of Multiple Deprivation 2015**



Source: Tees Valley Unlimited (2016a).

## 5 Development of institutional arrangements

Until 1968 local government in the area consisted of numerous districts: county boroughs, municipal boroughs, urban districts, and rural districts. These districts were in turn subsumed under the counties of Durham and North Riding of Yorkshire (a two-tier local government system), with the exception of the county boroughs of Middlesbrough and West Hartlepool (which formed a single-tier local government). In 1968 many of these districts were merged into the Teesside County Borough, Hartlepool County Borough, and Darlington non-metropolitan district. This meant that most of the Tees Valley-area was encompassed by a single-tier system; except for Darlington and the eastern most areas around Guisborough, Saltburn, Skelton and Loftus, which remained part of their respective counties. However in 1974, there was another local government reorganisation, in which a two-tier system was reintroduced: most of the area was administered by the County of Cleveland, with four boroughs: Middlesbrough, Stockton-on-Tees, Hartlepool and Langbaugh-on-Tees; while Darlington continued to be part of Durham county. In 1996 the local government system in the area reverted back to a single-tier system, when the County of Cleveland was abolished and Middlesbrough, Stockton-on-Tees, Hartlepool, and Redcar and Cleveland (formerly Langbraugh-on-Tees) became unitary authorities. At that point also Darlington became a unitary authority, no longer subsumed under Durham county.

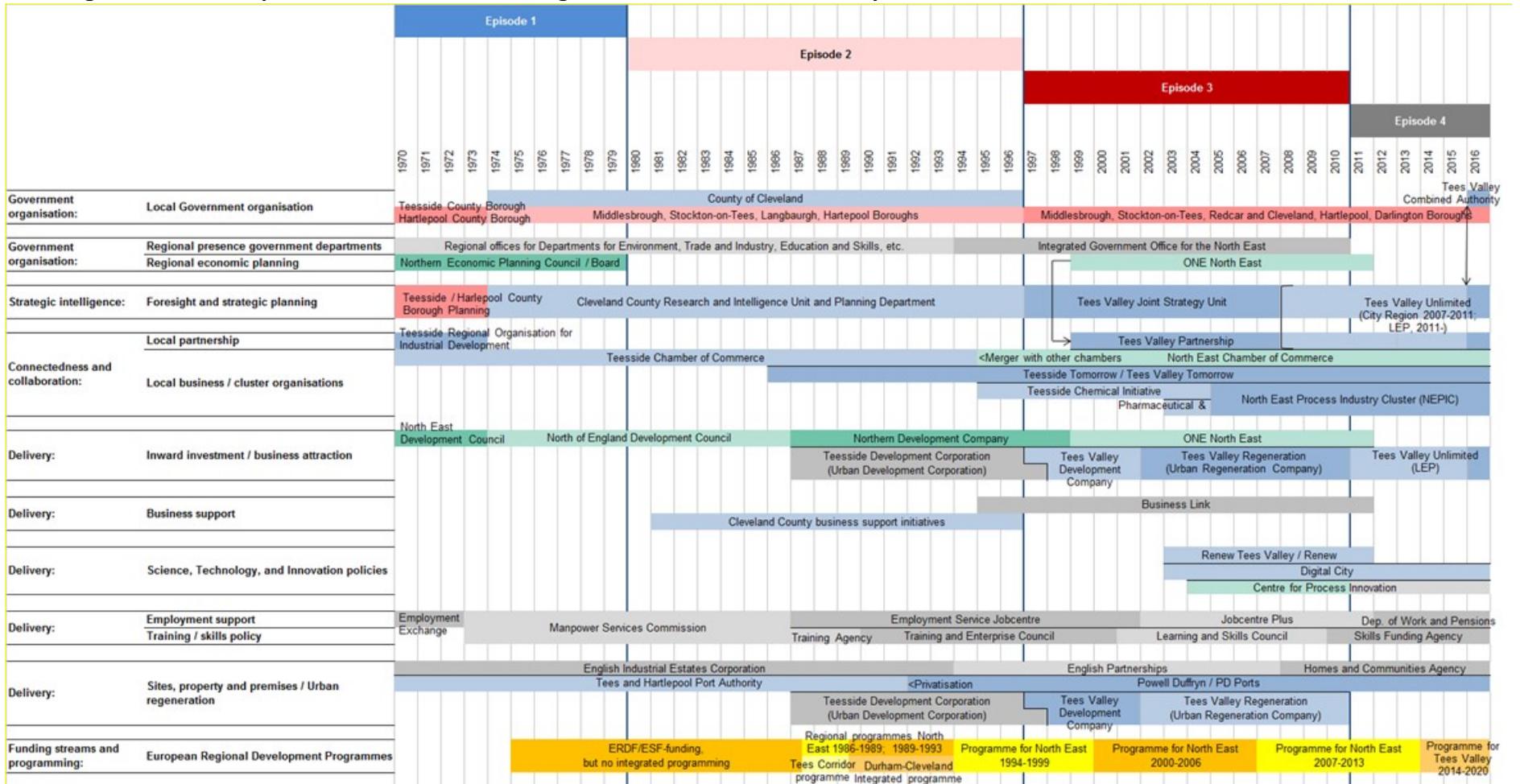
Figure 22 shows the changes that have taken place in institutional arrangements with regard to economic development in Tees Valley (with a particular focus on Middlesbrough and Stockton and surrounding areas). On the basis of changes in local government organisation, and large shifts in policy-direction at the central government (as power changed from one administration to another), four main episodes can be distinguished in the evolution of institutional arrangements and policies:

- Episode 1 (until 1979), in which local government was characterised by a two-tier framework (Cleveland County, and the boroughs), and policy was overall aimed at planning for projected economic growth.
- Episode 2 (1979-1996), in which the two-tier structure continued to operate, but policy shifted to responding to the severe crisis in the local economy and its aftermath.
- Episode 3 (1996-2010), in which the two-tier structure was abolished and the boroughs were made unitary authorities, while at the same time a strong regional layer was introduced to support economic development (with the establishment of the Regional Development Agencies). These changes facilitated a more integrated approach to the economic development of the Tees Valley-area, through the formation of the Tees Valley Partnership.
- Episode 4 (2010-date), in which the regional layer was abolished, but the arrangements to support policy-formulation for economic development at a city-

regional level continued and were even reinforced. The more integrated approach to economic development policy for the area, was also continued.

The rest of this chapter outlines the main changes in the institutional arrangements taking place within and between these episodes, in more detail.

**Figure 22: Development of institutional arrangements for economic development**



Grey indicates entities (controlled) at the national level, turquoise at the regional level, blue on a city-region level, and red at a local level.

### **5.1 Episode 1 (until 1979): Two-tier framework - Planning for growth**

As mentioned earlier, there was a broad consensus between the central government, local authorities, regional entities, major firms, and trade unions in the 1960s about the necessity to modernise the economy of the area. The Teesside-area was designated as part of the 'growth zone' in the North-East (together with Tyne and Wear, and parts of Durham County), which should be the main focus of investment and efforts to promote economic growth in the region (and offset the decline in other parts of the North-East, as a result of the closure of coal mines). From the early 1960s onwards a comprehensive programme for the development of the area was drafted and subsequently further refined, which basically guided the initiatives and actions of the main actors (central, local and regional government bodies, British Steel Corporation and ICI, and the trade unions) until the late 1970s. There existed a broad agreement between the main employers and other actors (including the trade unions), in which it was presumed that what was best for the large firms was best for the area. Institutionally this consensus was supported by the fact that many councillors at the local authorities were employees of BSC or ICI. Moreover, entities such as the Teesside Industrial Development Board (which existed from 1945 until 1969) and its successor Teesside Regional Organisation for Industrial Development (until 1974), also brought together representatives from the local authorities, employer organisations, trade unions, and other actors (Beynon et al., 1989).

The main elements of the programme were first formulated in a 1963 White Paper on the development of North-East England (Secretary of State for Industry, Trade and Regional Development, 1963). The Northern Economic Planning Council and Board – established in 1964 to facilitate strategic planning for economic development of the Northern region – further elaborated this programme in their 1966-report 'Challenge of the Changing North' (Northern Economic Planning Council, 1966). And the details for the area were then worked out in Teesside Survey and Plan of 1969 (Wilson and Womersley, 1969), which guided the consensus for the area's development of the 1970s. This programme aimed to 'upgrade' the whole of the area:

"Teesside, born in the Industrial Revolution, offers to the second half of the twentieth century both a tremendous challenge and an almost unique opportunity. The challenge lies in the legacy of nineteenth century obsolescence; the opportunity is to make it one of most productive, efficient and beautiful regions in Britain; a region in which future generations will be able to work in clean and health conditions, live in dignity and content and enjoy their leisure in invigorating surroundings." (Wilson and Womersley, 1969, p. 3).

The priorities laid down in the Teesside Survey and Plan were subsequently formalised in the Teesside Structure Plan (Cleveland County Council, 1977 / 1983). Cleveland County Council – through its Research and Intelligence, Economic Development and Planning units – implemented the structure plan, monitored its progress, and made alternations when necessary. The main focus was to accommodate the growth foreseen for the area,

but it also encompassed objectives to improve the environment, housing and amenities, and to stimulate research and technological innovation. However, in the end the expansion and modernisation of capital-intensive heavy industry took priority over other goals. Reservations from local authorities and local action groups about for instance the negative environmental effects of the development of Seal Sands, were brushed aside by the central government, the large industrial firms, and trade unions (Hudson, 1986; Beynon et al., 1989). Ambitions to elevate the existing Teesside Polytechnic to university-status, and to expand the campus, as to stimulate the development of the knowledge base in the area, did not receive backing from the central government and did not go ahead (Wilson and Womersley, 1969; Cleveland County Council, 1977 / 1983).

## **5.2 Episode 2 (1979-1996): Two-tier framework – Responding to economic crisis**

By the late 1970s it was clear that the objectives to increase the amount of employment in the Teesside-area, while also diversifying the economy and increase the quality of employment, were not going to be met. Job loss in especially steel, heavy engineering, shipbuilding and to a lesser extent chemicals, took place at a much faster rate than anticipated, and attraction of new employment proceeded only moderately. Unemployment was rising quickly. Doubts were being raised about the benefits for the area of continuing to cater to the needs of heavy industry:

“The structure plans aim to diversity the County’s economic base by attracting light manufacturing and service jobs, whilst at the same time they encourage the growth of capital-intensive industry by zoning 2,000 acres of land for further growth. Are these two things incompatible, or can they both realistically be pursued side by side?” (Cleveland County Council, 1979).

The broad consensus on the modernisation and upgrading of the economy thus fell apart. Moreover, in May 1979 a new Conservative government took over at the national level, leading to a number of very different focal points in policy, which would also significantly affect Tees Valley.

At the local level, the institutional framework remained more or less the same (until the next local government reorganisation in 1996). Within this framework, Cleveland County Council and the local offices of the Manpower Services Commission (MSC) tried to cope as best they could with the complete reversal of economic fortunes for the area, and the ensuing mass unemployment. This is further discussed in the next Chapter.

Some changes in the institutions did take place however. In the 1980s and early 1990s new business networks emerged, such as Teesside Tomorrow (later Tees Valley Tomorrow) and the Teesside Chemical Initiative, to represent the interests of the business community of the area, as ICI and BSC became less dominant. The Tees and Hartlepool Port Authority (which owns large parts of the industrial land along the river Tees, e.g. Seal Sands) was converted from a trust port to a private company in 1992. Furthermore, at the

regional level, local authorities in the North East of England, central government departments, and the regional sections of the Confederation of British Industry and the Trades Union Congress, came together in 1986 to enhance the resources and mandate of the regional development body. This was prompted by a desire for the region to compete more effectively for the attraction of inward investment, especially with Scotland and Wales (Anderson, 1992; Hassink, 1992). As a consequence, the existing North of England Development Council was replaced by the Northern Development Company.

Meanwhile, from the late 1970s onwards the national government launched a series of interventions under the heading of urban policy, as a response to the problems in many old industrial cities and towns. By far the most significant intervention within urban policy in the Tees Valley area, was the establishment of the Teesside Development Corporation, operating from 1987 until 1998. The Teesside Development Corporation was a second-generation Urban Development Corporation (UDC) established under the Local Government, Planning and Land Act of 1980. UDC were vehicles to carry out a development programme for a designated area; that is “to bring land and buildings into effective use, encourage the development of existing and new industry and commerce, create an attractive environment and ensure that housing and social facilities are available to encourage people to live and work in the area” (Local Government, Planning and Land Act, 1980; quoted in Robinson, 1993, p. 4). Exemplifying the philosophy of ‘property-led regeneration’ the task for UDCs was to ‘lever in’ private sector investment in urban development projects, which would then lead to the creation of new employment and other benefits for the community. UDCs were first and foremost accountable to the Ministry of the Environment, and thus as a consequence local authorities lost some of their control over planning and development in their area.

The Teesside Development Corporation stayed very close to this intended remit and philosophy throughout its lifetime (Robinson et al., 1999). It operated in a singular, opportunistic, and secretive manner, with the relationships with the local authorities and community organisations deteriorating quickly over time (Coulson, 1989; Robinson et al., 1993; Robinson et al., 1999; House of Commons Committee of Public Accounts, 2002). It did manage to implement a significant programme of developments across the area. This included some projects which corresponded with the priorities outlined in successive strategies such as Cleveland Initiative (1984), the Cleveland Structure Plan (1988), and the Cleveland Economic Strategy (1990), to further develop the port, to develop more opportunities for tourism, and to develop the service industry. With the support of the Teesside Development Corporation, the facilities of Teesport were expanded, and new road infrastructure was put in place, while a new Tees Offshore Base was created at the site of a former shipyard (Smith’s Dock). South of the river from Stockton, the former location of the Head Wrightson heavy engineering works, was transformed into a large mixed office and housing development (‘Teesdale’), which also included a new campus of Durham University (Queen’s Campus Stockton). In Hartlepool part of the docks were

converted into a marina with further visitor attractions. Other schemes (such as Teesside Park, Preston Farm, and Riverside Park) mainly consisted of out-of-town retail and industrial estates, with very little transformative impact (Robinson et al., 1999). While at still other sites, such as Middlesbrough Dock / Middlehaven and South Bank very little development took place. Hence for the amount of money it was able to spend (over £400 million in 10 years), the impact it had on creating new economic development prospects for the area, was rather disappointing.

### **5.3 Episode 3 (1996-2010): Regionalist framework and city-regional collaboration – Towards a more integrated approach**

In 1996, Cleveland County was abolished; but the new unitary authorities of Middlesbrough, Stockton, Hartlepool, and Redcar and Cleveland – together with Darlington – continued to collaborate on issues of economic development. They formed the Tees Valley Joint Strategy Unit to undertake strategic planning and generate economic intelligence. The five local authorities in the Tees Valley area also established the Tees Valley Development Company to take over some of the functions in attracting inward investment of the Teesside Development Corporation, whose operating period came to an end in 1998. In 2002, the Tees Valley Development Company was subsequently subsumed into Tees Valley Regeneration. Tees Valley Regeneration was a so-called Urban Regeneration Company, which, with the support of central government money, was made responsible for several regeneration projects in the area (in a similar fashion as the Teesside Development Corporation, but this time in close cooperation with the local authorities).

In 1997 the Labour Party won the national elections, and took control of the central government. This again meant a shift in priorities for subnational economic development policies in the United Kingdom. The new Labour government devolved more economic and political powers to Scotland, Wales, and Northern Ireland; and also intended to delegate some of these powers to the regions in England. In 1999 it established Regional Development Agencies, with a broad mandate and a substantial budget combining contributions from different central governments departments and from European funds, to further the economic development of the English regions (Perry, 2007). Concomitantly it also created Regional Assemblies, with representatives from local authorities, and business and civil society stakeholders. These were intended to act as precursors of a new regional tier of government, the plans for which – after a failed referendum in the North-East about more devolved powers in 2004 – were abandoned. The Regional Development Agency for North-East England – ONE North-East – provided some important new stimuli to the economic development policies in the Tees Valley area. ONE North East further delegated some of its budget and responsibilities to subregional partnerships within the North-East. Hence the regional framework instituted after 1997, offered a greater

availability of resources for subnational economic development, while the structure with subregional partnerships also allowed for some control at the city-regional level over the spending of these resources. For the Tees Valley area, a Tees Valley Partnership was formed in 1999, comprising of the five local authorities, the Chamber of Commerce, the Learning and Skills Council and Tees Valley Tomorrow (a local business organisation). The Tees Valley Joint Strategy Unit acted as the secretariat for this partnership.

This Partnership guided the production of the Tees Valley Vision, and after 2002 when the vision and associated investment programme were subsequently finalised, the Partnership was reformed and expanded into a body which would supervise the implementation. The Tees Valley Vision is an attempt to coordinate initiatives and actions in multiple domains and by various actors: it is built around three main themes: “creating sustainable jobs, creating attractive places, and creating confident communities” (Tees Valley Joint Strategy Unit, 2003). With regard to the future development of the economy, it emphasised the value of existing assets and activities: “we must recognise that our economy is a manufacturing one based on world class chemicals clusters, a port - the second largest in terms of volume in the UK, an infrastructure able to support further economic growth – and an engineering and growing service economy which is largely dependent on the manufacturing base” (Tees Valley Joint Strategy Unit, 2003, p. 7). In 2007, the Tees Valley Partnership was transformed into a more formal arrangement – Tees Valley Unlimited – with an overall leadership board, supporting boards for specific themes, and consultation forums (Tees Valley Joint Strategy Unit, 2006). Tees Valley Unlimited was put in place in anticipation of additional money from other sources than ONE North-East for the economic development of Tees Valley, as a result of the Northern Way-initiative and a multi-area agreement (which was indeed concluded in 2008).

#### **5.4 Episode 4 (2010-date): City-regional framework – New impulses?**

In 2010 a new government came to power at the national level, formed of Conservatives and Liberal Democrats. This coalition-government reintroduced ‘localism’ as a guiding principle for subnational economic development. This meant that the Regional Development Agencies were to be dismantled in England; hence ONE North East ceased operations in 2012. Instead a system of Local Enterprise Partnerships was set up, in which local authorities were invited to form partnerships with each other and local business, to determine priorities for economic development for a local area, and spearhead the implementation of these priorities. Tees Valley Unlimited – already in place - was made into the Local Enterprise Partnership for the Tees Valley area. The shift in national policy after 2010, also resulted in the wind up of urban regeneration companies. Hence Tees Valley Regeneration was terminated in 2010, with its urban development functions transferred back to the local authorities, while Tees Valley Unlimited took on the promotion of inward investment.

In October 2015 a Devolution Deal was agreed between the local authorities and the central government, about additional resources to implement an economic development programme for the area (over a 30-year period). In April 2016, the Tees Valley Combined Authority was subsequently established, with a number of powers in the areas of economic development, transport, housing, and skills, to support the realization of this long-term programme. As a result, Tees Valley Unlimited now not only acts as a Local Enterprise Partnership, but also supports policy-making and the execution of policies for the Combined Authority. In May 2017 elections took place for the 'metro-mayor' of the Tees Valley Combined Authority, which were won by Ben Houchen (Conservative Party). Thus, despite significant changes in policy at the national level after the 2010, there was a continuity in the main institutional arrangements for economic development in the Tees Valley-area, and the arrangements for collaboration and partnership-working were instead further reinforced and formalised.

## 6 Development of policies

Table 1 presents an overview of the main focal points for policies with regard to economic development in the Tees Valley-area, in each of the four episodes. Overall the evolution of policy in economic development has been rather inconsistent and disjointed, also as a result of the gaps and frequent changes in the institutional framework, discussed in the previous Chapter. Up until about 2000 a coordinated approach to the economic development of the area, after the swift decline of heavy industry and other manufacturing in the late 1970s and first half of the 1980s, had been absent. There was a shift from a broad consensus to modernise industry in the area and diversify the economic base through inward investment until the late 1970s, to a period in the 1980s and 1990s in which policies were incoherent and fragmented. The main focal point of central government policy became property-led regeneration from the mid-1980s onward, while local actors focused (with few resources) on coping with mass unemployment and supporting entrepreneurship and local businesses. After the New Labour government came to power in 1997, several changes in policy and governance took place; the ultimate effect of which has been the formation of an institutional framework in which policies for the economic development of the area could be better integrated and synchronised. At this point, also supporting innovation and technological development, became important focal points in some designated sectors. Despite the substantial changes that took place in the governance of subnational economic development after 2010 (as detailed in the previous chapter), there have been few changes in policy priorities for the economic development of Tees Valley.

**Table 1 Development of focal points for economic development policy**

	Special support for industries	Active labour market policy for redundancies	Inward investment / business attraction	Science, Technology, Innovation (STI) policies	Entrepreneurship / business support	Training / skills policy	Upgrade of built environment / Urban regeneration	Reclamation and remediation of sites and premises	Events and branding	Highlights
<b>Episode 1</b> (until 1979)	●	●	●			●	●			<ul style="list-style-type: none"> <li>• Modernisation of heavy industry, assisted by national government through e.g. Regional Policy investment grants., and financial support for British Steel.</li> <li>• Planning for projected growth, with investment in transport infrastructure, and efforts to diversify economy towards more light manufacturing and services (not successful).</li> <li>• Initial consensus between national government, local governments, and large companies (BSC and ICI), increasingly tenuous by the late 1970s.</li> </ul>

	Special support for industries	Active labour market policy for redundancies	Inward investment / business attraction	Science, Technology, Innovation (STI) policies	Entrepreneurship / business support	Training / skills policy	Upgrade of built environment / Urban regeneration	Reclamation and remediation of sites and premises	Events and branding	Highlights
<b>Episode 2</b> (1979-1996)		•	●		●	•	●	●	•	<ul style="list-style-type: none"> <li>• Divergence between local and central government policies.</li> <li>• Local initiatives to deal with crisis: mainly in active labour market initiatives (work creation and (re)training), and enterprise / business support.</li> <li>• Central government imposed 'property-led regeneration' through the Teesside Development Corporation and urban policy.</li> <li>• Teesside Polytechnic becomes Teesside University in 1992; Durham University establishes campus in Stockton, and first initiatives to facilitate technology transfer.</li> </ul>
<b>Episode 3</b> (1996-2010)			•	●	●	●	•	•	•	<ul style="list-style-type: none"> <li>• Better coordination between sub-regional / local, regional and national initiatives through Tees Valley Partnership and Tees Valley Vision.</li> <li>• Also focus on innovation and technology development, through Centres of Excellence and technology transfer / innovation programmes in process industry, digital media, and renewable energy.</li> <li>• Increased attention for skills and training of the labour force.</li> </ul>
<b>Episode 4</b> (2010- date)			•	●	●	●	●	●	•	<ul style="list-style-type: none"> <li>• Continuation of more integrated approach developed in previous episode.</li> <li>• Positioning area to take full advantage of new central government initiatives to promote economic growth across the UK, such as further devolution of powers and resources, Northern Powerhouse, and Industrial Strategy.</li> </ul>

### 6.1 Episode 1 (until 1979): Two-tier framework – Planning for growth

The programme as formulated in the late 1960s and early 1970s, to accommodate and facilitate projected growth in the area, consisted of three main elements: the modernisation and rationalisation of existing heavy industry, the expansion of the area's transport infrastructure and provision of industrial land, and the attraction of new employment in light manufacturing and services.

In the 1970s, large-scale investments took place in the steel industry and chemical industry to expand, modernise and rationalise their operations. These investments were

to a considerable extent facilitated by incentives offered by the central government. Under Regional Policy, there was a system of grants, premiums, tax allowances, grace periods, and loans for investment in buildings, plant and machinery, which came with the status of Development Area (most of the Tees Valley area) and Special Development Area (Hartlepool) (North-East Development Council, 1971; Warren, 1973). The grants varied somewhat over time, but were generally about 25 to 35% of the investment sum. In the second half of the 1970s, the Regional Development Grants to support investments in Cleveland County, regularly exceeded 25% of the total amount of grants for the whole of the United Kingdom (Foord et al., 1985, p. 32). Moreover, as a publicly owned corporation, the British Steel Corporation had its £3 billion investment programme (with the new plant in Redcar / Lackenby) financially underwritten by the central government.

The second major element of the 'modernisation' programme, was to provide industrial land and invest in new road and port infrastructure. To enable the expansion of the chemical industry and oil refineries, the reclamation of Seal Sands was to be continued, and provisions were made for the further development of Billingham and Wilton. For a new integrated steel plant, land was made available near Redcar (despite concerns about the environmental and visual impact). For the attraction of light manufacturing, several new industrial estates were established throughout the area (Cleveland County Council, 1977 / 1983). The main north-south and east-west highway connections connecting the area to the rest of the North-East were improved, and within the area a new primary road system was put in place to take the increase in the volume of car traffic into account (Cleveland County Council, 1977 / 1983). Also port activities expanded with the opening of a container terminal at Tees Dock in 1967, the iron ore terminal at Redcar in 1973, and new berths for the oil refineries and chemical plants at Seal Sands.

The third element was the attraction of new employment in light manufacturing and services. It was foreseen in Teesside Survey and Plan that employment in steel, chemicals and heavy engineering would drop slightly in the 25-year period from 1966 until 1991 (Wilson and Womersley, 1969). Hence if the ambitions for the area as a 'growth zone', compensating for employment loss in other parts of the North-East, were to be realised, additional employment needed to be generated. The Teesside Survey and Plan and after this the Teesside Structure Plan, proposed to accomplish this through the attraction of light, labour-intensive manufacturing (such as light engineering, electronics, textiles, food and drink, etc.), and to a lesser extent, of services and public sector activities. New investments were to be attracted through the elaborate system of investment incentives by the central government already discussed. Between 1967 and 1976, the central government also paid out Employment Premiums for each worker employed in manufacturing in the Development Areas. In addition, local governments catered for new industrial estates and office developments, as well as undertaking promotional activities for the attraction of new investments (supported by the North-East Development Council / North of England Development Council). Though the rate of attraction of light

manufacturing was reasonably good in the 1970s (compared to many other areas), it was (by far) insufficient to compensate for loss of employment in heavy industry (Cleveland County Council, 1979; Cleveland County Council, 1977 / 1983). Also in the service and public sectors, employment growth was less than expected. Part of this was because in 1979 the Conservative government cancelled an earlier decision of 1976 to relocate the Property Services Agency (with 3,000 jobs) to Middlesbrough (Hudson, 1990).

## **6.2 Episode 2 (1979-1996): Two-tier framework – Dealing with economic crisis**

The period from 1979 until 1996 – and especially the period from 1979 until 1990 – was characterised by a striking divergence between on the one hand the priorities and policies by the central government, and on the other hand the attempts to deal with the economic crisis and mass unemployment by local authorities and other actors in the area.

The attraction of inward investment continued to be one of the focal points of economic development policy in the Tees Valley area and the North-East (Hassink, 1992). Local authorities, and from 1987 also the Teesside Development Corporation, would promote the area within the UK; while the North of England Development Council and then the Northern Development Company (from 1986), would do the same internationally. However, central government in the UK made several changes with regard to Regional Policy during the 1980s, which significantly reduced the funds available to stimulate investment in the area. In 1982, the whole of Cleveland County was made into a Special Development Area, which meant a more favourable regime of grants and other incentives. But already in 1984 these grants were revised and the conditions were made more stringent and selective. The Regional Development Grant – which before 1984 was paid out automatically when certain conditions were met, and irrespective of any employment created – became more targeted on the creation of employment, and on projects that would not have happened without support (Wren, 1988). This meant that many of the investments by the large firms in Tees Valley (in particular ICI and BSC) would no longer receive assistance. In 1988, the Regional Development Grant was abolished. From then on only Regional Selective Assistance was available, which only provides grants for investments on a discretionary basis (Wren, 2005). Ultimately, the success in attracting large new establishments to the Tees Valley area was very limited. For instance, Samsung opened a plant for microwaves and computer monitors north of Billingham in 1994; but closed the plant again in 2004 never creating the 3,000 jobs initially foreseen (Gow, 2004).

From 1979, local authorities in the area – in particular Cleveland County Council – started to undertake several new economic development policies, to complement the attempts to attract inward investment. These were mostly aimed at supporting more indigenous development through entrepreneurship and growing local businesses (Hudson, 1986). Some of these measures were aimed to provide financial assistance to small firms (Gallant, 1982; Greene et al., 2008). Other measures focused on providing counselling and

information service (Robinson, 1979; Hickie, 1985). Later in the 1980s, the central government launched similar schemes to stimulate entrepreneurship and support businesses (partly funded through the European Regional Development Fund) (Greene et al., 2004). Furthermore, the British Steel Corporation founded BSC Industry already in 1975 – later renamed UK Steel Enterprise – to help create new alternative employment for people made redundant in the steel industry, by redeveloping land and buildings into sites for new economic activities, and by providing support and finance for business proposals by redundant workers (Young, 1987). In addition, a number of policies were enacted by local authorities and the Manpower Services Commission in the 1980s to combat and alleviate unemployment (often partly funded through the European Social Fund). MSC operated several make-work and training programmes over the years to help long-term unemployed and school-leavers (re)gain work experience and skills. Cleveland County Council tried to stimulate the formation of workers' co-operatives and community enterprises, through loans, grants, training, and advice (Gallant, 1982). Cleveland County Council furthermore operated several schemes to subsidise hiring unemployed people; and established new training centres to help (potential) workers acquire new skills (Gallant, 1982; Hickie, 1985). Most of these initiatives were however very small-scale, in relation to the size of the unemployment problem in the area (Foord et al., 1985). From the late 1980s onwards, the first initiatives started to emerge in Tees Valley and in the North-East region more broadly, to stimulate more technology transfer from higher education institutions and research centres, to firms in the area (Cleveland County Council, 1990; Hassink, 1992). In 1992 Teesside Polytechnic was moreover at last granted university-status, and in that year a new campus of Durham University opened in Stockton (Queen's Campus Stockton).

However, these initiatives and schemes took place in a context in which the central government imposed drastic cuts on the expenditures by local authorities. Through the Local Government, Planning and Land Act of 1980 and the Local Government Finance Act of 1988, the central government moreover increased its control on their policies, finances and tax rates. Hence, the resources and powers of local authorities to implement their own policies, were gradually reduced. As mentioned in the previous Chapter, the main response of the central government with regard to the issues and problems of old industrial cities and towns, was urban policy. Urban policy under the Conservative government of the 1980s and first half of the 1990s, operated from the philosophy of 'property-led regeneration': physical regeneration would stimulate new economic activities, which would then result in wider social benefits (Robinson and Shaw, 1994). From the late 1970s onwards a plethora of initiatives and instruments were instituted: various funding schemes for urban renewal and regeneration projects, an investment programme to reclaim and develop formerly industrial sites, the designation of certain

areas as Industrial Improvement Areas or Enterprise Zones, etc.<sup>3</sup> By far the most significant of these however, was the formation of the Teesside Development Corporation, operating from 1987 until 1998 (as discussed earlier). Although the efforts in the framework of urban policy in general and of the Teesside Development Corporation in particular, have led to important improvements on a localised scale, they seem to have been more a way of combatting the symptoms of the economic crisis within the area, rather than dealing with the underlying causes.

### **6.3 Episode 3 (1996-2010): Regionalist framework and city-regional collaboration – Towards a more integrated approach**

The Labour government which came to power in 1997 at the national level, initiated a series of new policies which would eventually lead to new focal points for the economic development of Tees Valley. As discussed, one of the most consequential measures was to establish Regional Development Agencies in 1999, which had a broad mandate and were relatively well-funded. The RDA for the North-East region – ONE North-East – passed on part of its funds to sub-regional partnerships to implement their own vision. The Tees Valley Partnership formulated a vision and programme of policies, which prioritized the further development of the chemicals / process industries cluster, and associated opportunities in renewable energy, environmental technologies, biotechnology, engineering and logistics. In addition, the Tees Valley Vision proposed several more generic policies aimed at business and enterprise support, upgrading the built environment, and enhancing people's skills base and aspirations. Remarkably, the remaining steel industry in the area was no longer regarded as a dependable and important asset, but rather as one of multiple elements within the 'process industry'. The comprehensive programme of the Tees Valley Vision, with some clear priorities, has

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<sup>3</sup> Under the Inner Urban Areas Act of 1978, local authorities could receive funding for urban renewal projects. Furthermore, Middlesbrough was made a programme authority, which meant that it could designate certain areas as Industrial Improvement Areas in which subsidies and loans were available to assist new private investment. In 1981 respectively 1983, Enterprise Zones with relaxed planning restrictions and tax exemptions were established in parts of Hartlepool and Middlesbrough. In 1984, the Cleveland Initiative was launched: a programme of investments for the reclamation and development of formerly industrial sites on both sides of the Tees-river. Under the Inner Cities Initiative, a task force was set up for central Middlesbrough in 1986 to support in targeting the money available for the area through the many different programmes at the local and central levels. City Challenge was initiated in 1991: it allowed local authorities to bid for funds for projects with economic, social and environmental objectives in disadvantaged urban areas; they were required to follow a partnership approach with business involvement and community support. In 1994, City Challenge and many other urban policy programmes were combined into the Single Regeneration Budget (1994-2001). Several projects in the Tees Valley area received support through City Challenge and the Single Regeneration Budget.

served as a guide for policies from 2002 onwards (albeit with various changes in the broader institutional and funding arrangements).

Furthermore, ONE North-East initiated a £200 million long term investment plan under the label Strategy for Success in 2002, to promote innovation and technology development in the region. As part of this strategy, a Science and Industry Council was established to oversee the investments, together with a venture finance agency NStar to provide access to finance, proof of concept investment, and commercialisation assistance (Hudson, 2011). At the centre of the investment programme were five Centres of Excellence in areas in which the region had particular research strengths and which offered opportunities for commercial success (identified in a report by Arthur D. Little). Two of these Centres of Excellence were based in the Tees Valley area: the Centre for Process Innovation (CPI) for process industries (which was to be based in the former ICI R&D-facilities at the Wilton Centre); and Codeworks, focused on innovation in digital media in Middlesbrough (and also Sunderland) (ONE North-East, 2012). The Centre for Process Innovation has been particularly successful as a research centre, and expanded quickly over the years since its establishment in 2004. It was initially focused on bringing research at the regional universities (especially Newcastle, Teesside and Durham) together with industry primarily based in the Tees Valley area. But now it has gradually expanded the technological domains within it is active, to also include biotechnology, nanotechnology, photonics, and printable electronics; and with this also its geographical reach in terms of university and industry partners is much larger (Goddard et al., 2012). CPI has been an important asset for the area and is at the centre of much new innovative activity in the remaining heavy industrial base, now renamed as 'process industry cluster' (mainly consisting of chemical industry, but recombined with expertise in engineering and steel-making). Codeworks has been less successful, and was remade into a business network organisation in 2004 (ONE North-East, 2012). ONE North-East also continued to support Digital City in Middlesbrough, which combines a knowledge base in digital media at Teesside University, with a support organisation and incubator for start-ups and businesses in Middlesbrough.

Moreover, the New Labour government developed a number of new initiatives in vocational training and development of skills after 1998. The 'New Deal' – which ran from 1998 until 2010 – was a workfare programme that tried to tackle youth unemployment and long-term unemployment, by creating new employment and training opportunities (Martin and Swank, 2012). In 2001, the Learning and Skills Council was established, to succeed the Training and Enterprise Councils, to coordinate and fund further education after the age of 16. It meant that resources and powers became again more centralised (similar to the period before the Training and Enterprise Councils, when the Manpower Services Commission operated). The Blair administration also developed several initiatives to improve the quality of vocational training provision, and support and incentivise young people in continuing their education (Chapman et al., 2007). Common to all these

initiatives was to involve employers (and to a lesser extent also trade unions) more closely in vocational training and in the development of skills at the lower end of the labour market. On the whole, the increased efforts have not led to more expenditures by, and a greater participation by, employers in vocational education and skill development (Martin and Swank, 2012). Hence, these new initiatives have done little to reverse the low skill equilibria that seems to persist in Tees Valley.

#### **6.4 Episode 4 (2010-date): City-regional framework – New impulses?**

The basic continuation of the institutional arrangements centred around the Tees Valley Partnership and then Tees Valley Unlimited, also ensured that the more integrated approach first outlined in the Tees Valley Vision was also continued and further extended. Hence the comprehensive approach persisted, with at the heart the promotion of innovation, enterprise and investment in a number of core sectors, especially the process industry. In the latest Strategic Economic Plan, these ambitions have been further specified by adopting the development and application of the ‘circular economy’ as a cross-cutting theme (Tees Valley Combined Authority, 2016). By implementing ‘circular economy’-principles, it is hoped that carbon emissions will be significantly reduced, by-products, heat and waste can be recycled, and at the same time productivity can be improved. The Tees Valley area seems well placed for this because of the existing company base and expertise, as well as the fact that the area still contains a large integrated industrial complex (Lord Heseltine of Thenford, 2016; O’Brien et al., 2017).

The continuity in the main institutional arrangements and in the basic vision for the economic development of the area, has thus generally allowed for a more long-term and integrated approach (to the extent possible). Since 2010 the funding for the policies and initiatives that are part of this approach, has become more direct, as funding is no longer through ONE North East, but straight from the central government and European Structural Funds. This permits more local control over the programme of policies and investments; and more flexibility. However, overall funding is at a somewhat lower level than during the previous episode. And funding now comes from a multitude of sources (European Structural Funds, Regional Growth Fund, Local Growth Fund, Devolution Deal, etc.), which has made funding more piecemeal and more geared towards capital projects (rather than covering operational expenditures over longer periods of time).

Nevertheless, the relatively stable institutional set-up and vision for economic development, has facilitated the Tees Valley area to deal with – and moreover take advantage of – some of the changes taking place in national policy and in the local economy. The Tees Valley area engages explicitly with the ambitions formulated for the Northern Powerhouse and in the newly conceived Industrial Strategy (HM Government, 2017); and is positioning itself to benefit from these broader policy programmes. In 2011, the Centre for Process Innovation (CPI) was made into a national research centre (instead

of a regional research centre), when it was made part of the central government's new network of centres of excellence: the Catapult Centres. The centre continues to be an important asset for the area's economy, and a central component of the innovation and technology policies (Tees Valley Unlimited, 2016b). Furthermore, the closure of the Redcar steel plant in 2015, has prompted (as part of the broader Devolution Deal) the establishment of the 'South Tees Development Corporation' in August 2017, to remediate and then redevelop the site of the closed works and the area surrounding it. It will function as a so-called Mayoral Development Corporation, with the metro-mayor for the Tees Valley Combined Authority overseeing its operations.

## **7 Assessment of the impact of institutional arrangements and policies**

In this Chapter the contribution of institutional arrangements and policies (as discussed in the previous two Chapters) to the performance and adaptation of the Middlesbrough and Stockton economy since the 1970s, will be assessed. Institutional arrangements have a more indirect impact on economic development: their impact is through whether they support – or fail to support – the formulation and implementation of policies. Hence in section 7.1 the institutional arrangements for the Middlesbrough and Stockton area are evaluated accordingly. Then in section 7.2 the role of policy is assessed in the success (or lack of success) in the adaptation process since the early 1970s, across the three key domains of the economic base, the labour market and the spatial structure (as analysed in Chapter 4).

### **7.1 Assessment of the impact of institutional arrangements**

The Tees Valley conurbation has historically been a functional economic area, with strong economic links between the various towns. Hence close coordination in policy between these towns has always made sense. However, the two-tier local government organisation in place from 1974 until 1996, and the unitary system in place since 1996, have been inadequate in this respect, and have instead fostered rivalry and fragmentation between the constituent boroughs. Nevertheless, over time close collaboration has emerged, and through the establishment of the Tees Valley Combined Authority in 2016 the deepened cooperation between the local boroughs was further formalised and extended. The territorial fragmentation in governance as a result of local government organisation, has been further exacerbated by the fact that various different policy initiatives in subnational economic development, have operated at different spatial levels over time: the North-East region, the city-region, local authorities, and even the whole of Northern England (in the case of the Northern Way-initiative)). Especially in the 2000s this created a “messy morass of competing spatial imaginaries” (Pike and Tomaney, 2009, p.26) and “a pattern of bewildering complexity” (Pike and Tomaney, 2009, p. 24).

Moreover, this territorial fragmentation coincides with a degree of functional fragmentation at the central level, with various government departments and executive agencies performing various tasks, and retaining most of the powers and resources with respect to economic development on a subnational level. These departments and agencies are primarily accountable to the central government, and hence there are strong forces working on these organisations to operate within their own ‘silo’ and remit, and apply a standardised approach without much sensitivity for local circumstances. This

hence makes the coordination of actions and pooling of resources at a subnational level, inherently problematic.

In addition, there has been a history of ‘instability’ and ‘perpetual restructuring’ in the institutional arrangements for subnational economic development in the UK.<sup>4</sup> This is mainly a result of occasional large shifts in central government policy, driven by changes in power from Labour to Conservative or vice versa. ‘Churning’ is the best way to describe this dominant pattern: a recurrent restructuring, refitting, dismantling and creation of arrangements. This is visible in the changes in local government organisation in 1974 and again in 1996 (and for the area there was already a reorganisation in 1968 as well). Central government executive agencies have furthermore regularly been subjected to reorganisations (as is evident from Figure 22). Furthermore, the creation and then abolition of the Teesside Development Corporation (1987-1998), and subsequently of ONE North East (1999-2012), are examples of such churn.

In this context of highly centralised powers and resources, combined with territorial and functional fragmentation, and frequent churn, arrangements of connectedness and collaboration between various actors with regard to the economic development of the area, were slow to arise. When the consensus on the modernisation and upgrading of the economy in the area fell apart in the late 1970s, arrangements to guide the responses to the severe economic crisis facing the area – were lacking. Especially in the 1980s and 1990s this has resulted in many different initiatives by different actors, but without much coordination, and sometimes without much consideration for local circumstances. This lack of coordination and lack of sensitivity for the needs of the area, has likely been the main cause of the ineffectiveness of the main policy responses in the 1980s and 1990s. Only with the Tees Valley Partnership in 2000, an arrangement came into being which connected local authorities, local business, and various central government agencies. Since then connectedness has gradually become more formalised and has been reinforced over the years, which has led to more considered, more consistent and more integrated policy initiatives.

Despite the fact that the governance arrangements for economic development of the area have been characterised by much fragmentation and churn, there has nevertheless been a relatively stable and good provision of strategic intelligence. Until 1996, this was provided by the Research and Intelligence, Economic Development, and Planning units of Cleveland County council. After Cleveland County council ceased to exist in 1996, the five local authorities in Tees Valley, decided to retain a unit for intelligence and strategic planning for the area as a whole: the Tees Valley Joint Strategy Unit. This eventually became part of

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<sup>4</sup> This has also been noted elsewhere, e.g. in Gray (2001), Elcock (2014), Mulgan (2010), Pike et al. (2015), and Norris and Adam (2017).

Tees Valley Unlimited (after integration with the Tees Valley Partnership in 2007). And from 2016 this function is integrated into the Tees Valley Combined Authority. Hence, strategic intelligence and foresight has normally been available in the area to assist the formulation of policy. Before 2000 this mainly supported the relatively small-scale initiatives in economic development by the local authorities of the area; but in 2000 and subsequent years, this has clearly facilitated the more integrated approach to economic development policies which then emerged.

Hence until about 2000, the institutional arrangements did not support the formulation of a coordinated policy approach to the economic challenges facing the area. Since then arrangements have indeed been in place for a more integrated approach, bringing various important actors together. This more integrated approach has furthermore also been facilitated by the historically strong arrangements for the provision of strategic intelligence. Despite the improvements that have taken place in the governance of economic development policy in the past two decades, the execution of policies is still plagued by the frequent churn in the arrangements and in funding schemes, as well as a general lack of resources to bring about change on the long term.

## **7.2 Assessment of the impact of policies**

The picture concerning the role of policy with regard to adaptation in the economic base in the Middlesbrough and Stockton area, is mixed. Efforts aimed at inward investment – later supplemented by policies for business and enterprise support to promote more indigenous growth – have not led to lasting and significant new economic drivers; despite some initial success in attracting investment in food processing and textiles in the late 1960s and early 1970s. Furthermore, the ‘property-led regeneration’-policies in the second half of the 1980s and first half of the 1990s, have *accommodated* growth in retail, leisure and lower-end business services (especially through the Teesdale, Teesside Retail and Leisure Park, Preston Farm developments), but have likely not *driven* this growth. And as a somewhat unintended effect of the expansion of public services (especially in health and residential care), the public sector has increasingly become a source for new employment (also through multiplier effects further up the supply chain). These policies have thus helped in creating much needed new employment opportunities in the area; but have also reinforced a pattern of a post-industrial transition towards low-productivity, little-dynamic service activities. The innovation and technology development policies aimed at the process industry and related activities (and to a lesser extent for digital media) enacted since the turn of the century (supplemented by targeted inward investment, and business and enterprise support) may have advanced some new economic dynamism however: in recent years, several new ‘branches’ have emerged or started to emerge, in materials, low carbon technology, renewable energy and recycling (although there is no visible impact yet on the performance on the main economic indicators).

With regard to adaptation in the labour market, policies have on the whole been rather ineffectual. With deindustrialisation the area lost an important part of its previous skill-base. As a result of a quick reduction of manufacturing employment much of the existing skills-base was devalorised. Workers that found new employment in the area often had to learn and utilise very different types of skills; while others migrated to other parts of the country or even abroad, or saw their skills erode as a result of worklessness. Labour market policies in the 1980s and 1990s to address this, and support workers who were made redundant, were small-scale, given the scale of the problems. The substantial public investments in upgrading the skill-base since the 1990s, have had only a marginal effect on the course of economic development of the area. Public investments in education and further training have not been matched by private investments. And there is still a lack of opportunities in the area in more high-skill occupations (with the exception of some pockets in engineering, professional occupations, and IT / digital media). Low aspirations are being confirmed by the overall relatively poor quality of the jobs on offer in the area (GHK, 2000; Chapman et al., 2007; Tees Valley Unlimited, 2014; also Pike et al., 2017).

With regard to adaptation in the spatial structure, the considerable policy efforts have had some successes; but these efforts seem principally to have been a way of combatting the symptoms of poor socio-economic performance, rather than the underlying causes. The investments in physical infrastructure and in improving the overall environmental conditions in the area (e.g. through reclamation of brownfield sites, further development of Teesport and offshore facilities, Tees barrage, Teesmouth nature reserve) were indeed important and necessary, but these improvements did not constitute sufficient conditions to bring about new growth. The extensive efforts aimed at regeneration and combatting deprivation, have furthermore led to some important improvements at a localised scale, but they appear to have had little impact on the overall economic prospects for the area. Also currently, there is still a lack of variety and quality in the housing stock, and the main town centres are generally not considered attractive.

## 8 Conclusions

The area around Middlesbrough and Stockton industrialised rapidly in the latter half of the 19th century and first half of the 20th century, on the back of the iron and steel industry, heavy engineering, shipbuilding and later also chemicals. These industries not only shaped the make-up of the economy of the area, but also the skills and mentality of its population, its (lack of) civic institutions, and its physical appearance. From the late 1940s onwards the involvement of the central government increased within several of the economic mainstays (especially in steel and shipbuilding) as well as within the development of the area in general, reinforcing the overall pattern of dependency on heavy industry. In the late 1970s and early 1980s, the area's economy went through a severe crisis, with the downsizing, restructuring and many closures in heavy industry and other manufacturing. Arguably, the economy of the area has never really recovered, and has not been able to adapt effectively.

The groundwork of the apparent brittleness of the area's economy was laid in the period leading up to the crisis, with the major firms becoming part of larger firms with head offices elsewhere, a lack of investment and modern technology in especially steel and heavy engineering, and the national interests with regard to heavy industry within the area taking priority over other local considerations during the boom-period of the 1960s and early 1970s. In the 1980s the area's distinctive assets were devaloured or diminished: the skill-base of large segments of its labour force, the equipment, technologies and expertise associated with various forms of manufacturing, and the extensive infrastructure of roads, railways, port facilities and utilities. Leveraging and converting these assets to foster new growth prospects, has by and large not been successful. While some of the negative legacies of the area's industrial past – poor housing, relatively few amenities, environmental degradation, large industrial sites, a mindset of utilitarianism and compliance – have formed large obstacles for renewal.

Policy responses to the severe crisis and its aftermath, were for a long time disjointed and ineffectual. This can in large part be explained by the fragmentation and lack of consistency in local government organisation and other governance arrangements, and the lack of resources and powers at the subnational level. The central state retains many powers and resources in many domains, and there have been frequent changes in its priorities with regard to policies affecting economic development (economic policy, labour market, education, etc.). Connectedness and collaboration between actors and control of resources within the area were at a very low level for several decades, which made that the area has been at the mercy of decisions and forces elsewhere. Because of this lack of coordination and lack of sensitivity to local needs, there was a period of relative chaos in economic development policies in the 1980s and 1990s. Only after 2000, actors within the

area have been able to take matters in their own hand to a certain extent, and start working on a more coordinated and focused renewal process.

Policies to attract new investment to the area in the 1970s and 1980s did support the new investment programmes at ICI and BSC, but only attracted a very moderate amount of new manufacturing activity. The main response of the central government to the problems of old industrial towns from the late 1970s until the late 1990s was urban policy, operating from a philosophy of 'property-led regeneration'. As part of this, several large projects were realised by the Teesside Development Corporation, and money was invested in urban renewal. Though this has led to improvements at a localised scale, it has helped little to generate new economic prospects for the area. Meanwhile local actors (with limited means) tried to cope with mass unemployment through job creation and training schemes, and attempted to promote more indigenous economic development. It is only around 2000 that a more integrated policies were established, with more coordinated actions in several policy domains. Most significantly, this led to initiatives to enhance the knowledge base and support innovativeness in especially the process industry (the remaining chemical, steel and engineering sectors), and to a lesser extent IT / digital media. This has contributed to the branching out in some new economic activities, such as renewable energy, low carbon technology, recycling, and offshore technology.

These experiences lead to several lessons for institutional arrangements and policies in the economic development the Middlesbrough and Stockton area and similar places:

- Local control, stability and consistency, and extra funding for extended periods of time, are crucial for making 'transformational change' happen. This has however been an important bottleneck for a long time. The LEP-framework, the establishment of the Combined Authority, the devolution-agenda, and the Industrial Strategy, may potentially offer steps in the right direction (at least for the Tees Valley area). The question is whether, this set of arrangements will persist for a longer period (two or three decades), and not be subject to another radical change in policy at the central level.
- Preserving assets (skills, know-how, technology, equipment, etc.) is crucial when faced with disruptive economic change, as an area will only be able to renew itself building on its distinctive assets. Moreover, slowing down the disruption will allow firms and their employees more time to adjust to new economic realities and move into new directions.
- Attraction of inward investment and policies for urban renewal, will likely not yield (lasting) new economic dynamism; *unless* these policies build on existing strengths, and are complemented by business and enterprise support measures and policies to support technological development and innovation.

- There is still relatively little attention in Tees Valley for place branding and for organising public events. These could however be important in changing some of the negative perceptions of the area (including by the people within the area). Changing these perceptions could help in overcoming some of the low aspirations among large sections of the population, as well as attracting new people and new investment to the area.

## Appendix: Timeline of events

- 1969 Publication of “Teesside Survey and Plan”, which guided development of the area in the 1970s.
- 1973 White paper “British Steel Corporation: Ten Year Development Strategy” by Department of Trade and Industry. New investment in steel-making and steel-processing by British Steel in Redcar (the ‘South Teesside works’) in the years ahead; while much of the older plants in the area are closed.
- 1974 Local government reorganisation: introduction of two-tier system. Creation of non-metropolitan county of Cleveland, with four boroughs: Middlesbrough, Stockton-on-Tees, Langbaugh-on-Tees and Hartlepool (while Darlington continued to be part of Durham county).  
Publication of “Teesside Structure Plan”, formalising the ambitions of the “Teesside Survey and Plan” in terms of spatial planning.
- 1976 First signs of a severe crisis in manufacturing and the steel industry in particular, initially triggered by the Oil crisis of 1973-74, but revealing more structural issues related to competition from abroad (particularly from lower cost locations), slow demand (as the post-war reconstruction and boom came to an end), and the application of new production technologies. This led to many closures and large-scale restructuring operations in the next decade in manufacturing in general, and the steel industry in particular, in the Middlesbrough-Stockton area and elsewhere, and concomitant considerable losses of employment.
- 1978 White paper “British Steel Corporation: The Road to Viability” by Department of Trade and Industry. Revision of the strategic course for the British Steel Corporation: abandonment of the expansion programme and accelerated closure of older plants. The plans for the new integrated plant in Redcar are only partly realised, which leaves the plant with a lack of steel-processing capacity.
- 1985 The unemployment rate for Cleveland County peaks at about 24%.
- 1986 Replacement of the North of England Development Council by the Northern Development Company, as entity for attracting inward investment to the North East region.
- 1987 Establishment of the Teesside Development Corporation.
- 1988 Privatisation of British Steel Corporation, renamed to British Steel.
- 1992 Teesside Polytechnic becomes Teesside University; and Durham University establishes a campus in Stockton.
- 1996 Another local government reorganisation: reintroduction of a single-tier system. Cleveland County abolished. Middlesbrough, Stockton-on-Tees, Redcar and Cleveland, Hartlepool and Darlington become unitary authorities.  
Tees Valley Joint Strategy Unit and Tees Valley Development Companies established as vehicles for cooperation on economic development between the 5 local authorities in the city-region.
- 1998 Dissolution of the Teesside Development Corporation

- 1999 Establishment of ONE North East, the Regional Development Agency for the North East of England, with a broad mandate and substantial resources to further economic development in the region. Northern Development Company is merged into ONE North East.  
Merger of British Steel with Dutch firm Hoogovens, to form Corus.
- 2000 Tees Valley Partnership established, comprising of the five local authorities in the Tees Valley area, the Chamber of Commerce, the Learning and Skills Council and Tees Valley Tomorrow. The Partnership is prompted by the intention of ONE North East to delegate some of its responsibilities and budget to various sub-regions in the North East of England. The Tees Valley Joint Strategy Unit serves as secretariat for the Partnership. The Partnership guided the production of the “Tees Valley Vision”, and subsequently oversaw its implementation. The “Tees Valley Vision” offered a broad-based vision on the development of the Tees Valley economy and priorities for policy.  
Corus restructures South Teesside works (renamed Teesside Cast Products), leading to a further loss of about 2,000 jobs.
- 2002 ONE North East initiates “Strategy for Success” to promote innovation and technological development across the North East region. As part of this programme, the Centre for Process Innovation is established as a centre for excellence for the process industries, based at the former ICI R&D facilities at the Wilton Centre.  
Tees Valley Development Company becomes Tees Valley Regeneration. Tees Valley Regeneration was part of wider programme of Urban Regeneration Companies in the UK.
- 2004 In a referendum in the North East-region about more devolution of powers to the region (coupled with direct elections for the Regional Assembly), a large majority voted ‘no’. After this plans to consolidate a regional tier of government for the English regions, were abandoned by the Labour government.
- 2007 Tees Valley Partnership is converted into Tees Valley Unlimited, which provides a more formal arrangement to govern economic development policy for the area, anticipating a multi-area agreement (with additional resources) in 2008.  
Corus is taken over by Indian conglomerate Tata, and is integrated into Tata Steel.
- 2008 ICI ceases to exist as a separate company; take-over by AkzoNobel.
- 2010 Tees Valley Unlimited designated as the Local Enterprise Partnership for the Tees Valley area. ONE North East to be dissolved (ceased operations in 2012); and also Tees Valley Regeneration was closed (as the programme of Urban Regeneration Companies was discontinued).  
Tata Steel decides to mothball Teesside Cast Products), and ceases operations there (though mills at Cleveland, Skinningrove, and Hartlepool continue their operations).
- 2011 The Centre for Process Industry is made into a national research centre, as part of a new network of Catapult Centres.  
Thai firm Sahaviriya Steel Industries (SSI) buys Teesside Cast Products, and

resumes production the following year after a refurbishment.

2015 Devolution Deal agreed between the local authorities in Tees Valley, Tees Valley Unlimited, and the central government, about additional resources to implement an economic development programme for the area (over a 30-year period), including establishment of a Combined Authority with an elected mayor.

Iron- and steel making facilities are again mothballed at Teesside Cast Products plant. Remaining 1,700 workers are made redundant. SSI UK is put in liquidation.

2016 Formation of the Tees Valley Combined Authority.

2017 Elections for a 'metro-mayor' of the Tees Valley Combined Authority, won by Ben Houchen (Conservative Party).

Establishment of the 'South Tees Development Corporation' as a Mayoral Development Corporation, to remediate and then redevelop the site of the closed Teesside Cast Products works and its vicinity.

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