The End of Coal Mining in South Wales: Lessons learned from industrial transformation

GSI REPORT

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May 2017
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May 2017

Written by Travers Merrill and Lucy Kitson
Executive Summary

This case study of coal mining in South Wales in the United Kingdom is a contribution to a project undertaken by the International Institute of Sustainable Development (IISD) and the Chinese Energy Research Institute of the National Development and Reform Commission. The case study explores the impact of actions taken by government and civil society to mitigate the consequences of the coal industry’s contraction, and to identify lessons that might be applicable to the planned transition away from coal mining in Shanxi Province, China.

The case study reviews the economic and political context of coal mining in South Wales, also known as “the Valleys.” It outlines the contemporary challenges by briefly describing the origins of coal mining, its rapid growth from the 1880s during the industrial revolution, its severe contraction during the economic depression of the 1930s, its resurgence during the Second World War, and its gradual but irreversible decline and eventual disappearance in the 1990s. It then examines the pronounced social and community consequences of mining and the closure of collieries, the significant impact of unionized labour and the efforts of government to counter unemployment and economic decline through regional policy. It examines the work of institutions, including the Welsh Development Agency, to mitigate the consequences of pit closure and reviews the contribution of European Union funds for this purpose.

Despite the inability of policy to offset the social impacts of industrial decline in South Wales, the case study does provide some indication of how mitigation options can be developed in other mining areas facing major industrial change and realignment. A key finding is the need to develop a comprehensive response that includes measures that generate economic activity, improve infrastructure, maintain social cohesion and establish effective institutions to implement the response.

The experience of government and its many delivery bodies gave rise to considerable lessons regarding the challenges of transforming the economy of former mining communities in South Wales. But perhaps the overarching lesson is the powerful influence of global economic factors and the need to establish a critical mass of local skills and resilience to respond to both the closure of collieries and subsequent economic changes.
Box ES1. Key lessons learned in South Wales from the end of coal mining

Strengthening the local economy requires

• Ensuring that strategic programs are precisely tailored to the communities they are intended to benefit.
• Building on existing economic activity, however modest, to anchor recovery in the local community.
• Adopting a clear and deliverable plan to diversify the economic base of former mining communities at all levels.
• Replacing mining with new manufacturing activity.
• Ensuring that local suppliers benefit from new economic activity.
• Supporting individual entrepreneurs to develop products and services and bring them to market.
• Retraining the workforce.
• Establishing a strong connection between higher education and business.
• Adopting new technology, which requires significant planning and resources to overcome the legacies of coal mining and to generate a new approach to economic prosperity.

Improving the physical infrastructure and environment requires

• Identifying and prioritizing investment to counter the infrastructure deficit.
• Appreciating that the natural landscape is a significant asset and provides a foundation for future economic prosperity through tourism, outdoor activity and sport.
• Building, maintaining and improving the housing stock, which delivers better health and well-being, and provides an opportunity for training, employment, increased civic pride, and increases people's desire to remain in the area and investing in its future.

Strengthening community cohesion and support for economic transformation requires

• Devising and delivering adequate forms of welfare protection.
• Understanding the supported communities through high-quality and adequately resourced research.
• Appreciating that economic renewal is greatly strengthened by the existence of a robust and dynamic cultural identity, and that community participation in the process of economic transformation is an important factor in determining success.
• Acknowledging that communities are not responsible for their own economic decline and are not equipped to bring about change without strategic government.

Establishing effective delivery institutions involves

• Transforming the economy of former mining areas through a long-term political commitment to strategic objectives and allocation of sufficient resources.
• Delivering economic transformation through the interaction of many interests at all levels in a dynamic process of renewal. Clear institutional roles and responsibilities are required, together with agreed and robust linkages and communications.
• Placing the overall responsibility for regional economic regeneration in a specialist body working with government and other institutions and charged with driving partnerships and collective progress forward.
• Arranging that civil servants involved in economic regeneration possess the financial and commercial competencies to support and advise business, and to engage educational institutions and with local communities.
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1.0 Introduction

1.1 South Wales and Shanxi Province

This case study is one of three produced by the International Institute on Sustainable Development (IISD) to inform Shanxi Province, China, of the experience and lessons learned elsewhere on the phasing out of coal mining and interventions to address the resulting economic and social consequences.

At first glance there would appear to be few similarities between the former coalfields of South Wales, an area of just 2,500 square kilometres (km$^2$) with a present population of around 757,000, (International Centre for Regional Regeneration & Development Studies, 2003) and the Shanxi Province of China, which covers an area of 155,000 km$^2$ with a population of over 36 million, and which mines 10 per cent of the world’s coal. Despite the enormous disparity of scale, the experience of South Wales in confronting the closure of pits and the end of its mining industry delivers some useful insights for governments and collieries elsewhere that are facing industrial transformation.

In both South Wales and Shanxi Province coal mining began with the exploitation of easily accessible deposits of coal by local communities, which then became intricately connected with the manufacture and evolving technology of iron. The rate at which industrialization progressed and the resulting demand for coal during the late 18th and 19th centuries is different, but both areas became reliant on this single extraction industry and on moving coal by rail—south to the ports on the coast for export in the case of South Wales, and east to Pukou for shipment along the Yangzi (Thompson, 2003) in the case of Shanxi Province.

The geopolitical contexts in which the mining industry then progressed in these two parts of the world are very different, but both grew according to the level of available investment, both drew in rural labour to provide the manpower necessary to extract the coal and both witnessed extreme and dangerous working conditions and low wages. When demand for coal was high, mining companies prospered and their workforce and families survived albeit often at subsistence levels. When the demand for coal declined, the pits closed, workers were laid off and, as in South Wales during the 1930s, there was severe poverty, destitution and outward migration.

Whereas coal mining in Shanxi Province expanded exponentially after 1949, coal production in South Wales experienced just a short period of growth after the Second World War due to the post-war construction effort. Over the second half of the twentieth century, the industry declined as domestic use of coal fell away due to clean-air legislation and the discovery of North Sea oil. Despite a temporary reprieve following industrial action in the 1970s, the ongoing unprofitability of the industry and the recession of the 1980s led to official recommendations for pit closures. Renewed and intensified industrial action by miners only delayed the program of closures and by the end of the 20th century, coal mining in South Wales had all but disappeared.

Shanxi Province is now facing intense contraction as the government addresses the need to reduce production. The impact on the local economy and the workforce is challenging and painful. The consequences of both closing unofficial pits and capping the production targets of official enterprises is understandably compounded by the challenge of investing in the most viable collieries until they too are closed, to replace lost employment through the establishment of new industries, and to retrain the existing workforce to ensure their productivity and continued contribution to the nation’s wealth.

South Wales faced all these challenges alongside a complex political and economic structure. Numerous programs and interventions were adopted, with varying degrees of success. Lessons were frequently learned the hard way, and were sometimes able to make the schemes that followed more effective.
1.2 Case Study Framework and Methodology

The South Wales experience is broad and was acquired over a long period of time, and because it is likely that there are many disparate lessons that may be useful in the discussion around plans for Shanxi Province, a correspondingly wide approach is taken in this case study.

An evaluation of policies and programs in South Wales to support the industry and its mining communities through its industrial transition requires a review of the political and economic controversies surrounding coal in recent years. The history of the South Wales coalfield has helped determine and shape past and contemporary policies and initiatives to counter the economic and human impact of mine closure. Accordingly, the case study sets out the political and economic context in which the mining industry in South Wales was created and then collapsed, before examining the range of interventions designed to ameliorate the impact of pit closures. These interventions are examined under four headings: Strengthening the local economy; Improving the physical infrastructure and environment; Revitalizing community cohesion and support for economic transformation; and Delivering policies and practices.

This evaluation is based on the premise that policies are directed toward existing coal mining areas and the population that remain there, and not toward moving surplus labour out to regions where job opportunities are more prevalent. Encouraging surplus labour to move was entertained by British governments during the 1920s and led to increased migration which in turn only depleted mining areas of the social capital necessary for their survival (Pitfield, 1973). It was soon understood that the industrial base of these communities needed to be revitalized, and the overall problem was only magnified by encouraging workers to disperse to uncertain employment prospects elsewhere. A proposal to move the entire population of Merthyr Tydfil, a town in the Heads of the Valleys, was soundly rejected (Rowlands, 2002). The expectation that miners would relinquish their sole (though diminishing) source of income and willingly sever all family and community networks and move to a different industry and lifestyle in the southeast was regarded as impracticable and as unrealistic—as was meeting the costs of such a migration. In China, the imperatives and mechanisms may allow the relocation of communities and leave behind a residual population sufficient to maintain an economically and socially sustainable community, but after the 1940s the British government never contemplated or adopted policies designed to depopulate the South Wales valleys or other coal mining areas in Britain.

The methodology adopted includes an extensive review of the literature and a number of interviews with key civil servants responsible for the delivery of programs in South Wales and a small number of Welsh politicians—including a former First Minister—who were responsible for economic development policies related to South Wales. A number of academics with expertise and experience in the history of the South Wales’ coalfields and strategic interventions were also interviewed.

1.3 The Geography of the South Wales Coalfield

The South Wales coalfield has an east-west length of nearly 145 kilometres and an average width of 24 kilometres in an elongated basin, with a rim of millstone grit and carboniferous limestone with an up-fold in the centre which brought coal deposits comparatively near the surface. Deep north-south valleys cut through these formations providing access to coal seams through their sides and deep vertical shafts, producing bituminous coal in the east, high-grade steam coal in the central coalfield, and anthracite in the west. Faults in coal seams were numerous throughout the geological formations, and extraction could be complex, expensive and dangerous.

1 Through the provisions of the Special Areas (Development and Improvement Act) 1934 and its Industrial Transference Board. See http://discovery.nationalarchives.gov.uk/details/r/C3057005.
2 See list in Appendix A
Mining communities were—and remain—tucked into the floors of these inaccessible valleys around the pit heads, precisely reflecting the pattern of mining activity.

The South Wales coalfield is synonymous with the term “the Valleys” but care needs to be taken in using this term because it would be convenient to regard the coalfield as a homogeneous area, whereas the level of deprivation was not entirely uniform. The southern mouths of the valleys are closer to the coastal strip and the key ports of Port Talbot, Swansea, Cardiff and Newport and benefited accordingly. The most isolated and inaccessible northern reaches of the Valleys, known as the “Heads of the Valleys,” have always fared far worse from depopulation and the economic consequences of colliery closure.

### 1.4 Terminology

The term “South Wales coalfield” refers to the area covered by numerous individual collieries. As these collieries are to be found strung out along a number of valleys, the South Wales coalfield is colloquially called “the Valleys,” and this term is also used when appropriate. Where these valleys open out onto the coastal plain, the term “mouths of the Valleys” is used, and the upper reaches of these valleys where they terminate in the uplands are called the “Heads of the Valleys,” and this term is also used.

![Map of coal mines in South Wales](Source: Northern Mine Research Society, n.d.)

**Figure 1. Map of coal mines in South Wales.**

2.0 The Political and Economic Context of Coal Mining in South Wales

The history of South Wales from the mid-19th to the late 20th century is in great part the story of coal mining, but it is worth remembering that before the prominence of “King Coal” Wales’s industrial revolution had begun much earlier with slate quarrying, and copper and iron-ore mining. By 1827 the South Wales iron industry furnished half of Britain’s iron exports (Jones, 2014), which generated a corresponding boom in coal production—thus, initially the coal industry served the iron industry. Coal owners made huge profits, employment grew, inward migration soared and new pits spread along the Valleys. The particular qualities of Welsh coal for domestic heating and the production of steam for the railways and steamships (including battleships of the Royal Navy) was widely acclaimed and resulted in an ever-increasing exploitation of coal reserves, particularly in the central Rhondda valleys (Davies, 2015). By 1891 30 million tonnes of coal was mined in South Wales, which rose to 57 million tonnes by 1913 (Jones, 2014)—one fifth of British coal production—employing over a quarter of a million miners (see Figure 2).

Figure 2. South Wales Output and Employment as a % of the UK (1874-1944)


Toward the end of the 19th century, the industry was characterized by rapid and uncontrolled growth. Matters of health and safety were of little importance in the race for increased productivity and profit, and this race had profound consequences (Curtis, 2014). Just a hint of what was to come was revealed in 1898 following a strike of workers demanding higher wages from mine owners, which resulted in the formation of the South Wales Miners Federation (the “Fed”) and its locally organized colliery “Lodges” (Curtis, 2013). On this occasion the Fed lost its fight to keep the colliery open, but miners were now organized, and they displayed a determined and confrontational approach to industrial relations (Gower, 2012).

Increasing dissatisfaction at conditions and low wages prompted a deep questioning of capitalism among miners and extensive support for “syndicalism”—bringing the means of production under workers’ control (Curtis, 2013). Political energy was repeatedly ignited by miners’ pay and conditions, and by the deaths of miners in numerous pit disasters (see Figure 3). Over 6,000 people lost their lives in pit disasters in the years up to 1970 excluding those who died of injuries or from mining-
related diseases (Welsh Mining Disasters, nd). Anger erupted in 1910, when a strike of 11,000 miners seeking higher wages and improved safety conditions and South Wales became a focus of industrial unrest organized by the Fed involving violent battles with the police (Evans & Maddox, 2010).

Figure 3. Deaths in South Wales and UK Mining (1874-1915)

2.1 The Great War and Economic Depression

The start of the Great War of 1914 led to an increased demand for coal (notwithstanding that the Royal Navy had moved from coal to oil at the turn of the century) and increased profits for the mine owners. In consequence, miners demanded higher wages. Mine owners refused to concede, and a strike of all collieries in South Wales was called in 1915 (NUM, nd). In 10 days the government backed down and was forced to assume temporary control of the industry to support sufficient production to sustain the war effort. By 1918 the pay of miners had doubled (Miners’ Federation of Great Britain, 1920).

1920, however, proved to be a turning point for the South Wales coal industry. The mines were taken back under private ownership and wage agreements were abandoned; simultaneously global recession and declining use of coal led to a fall in demand for, and the price of coal (Supple, 1989). The depression was catastrophic for a community that relied entirely on coal extraction: wages plummeted and miners were laid off, with unemployment in Wales rising over 25 per cent at certain times during the depression (Constantine, 1983). Extreme poverty gripped the South Wales valleys and daily survival relied on self-reliance and local welfare support organized by the Fed. By 1922 the Labour Party had won all parliamentary seats in South Wales (Curtis, 2013).

The inter-war depression resulted in a major exodus of miners from the South Wales coalfield that served to strengthen the militancy of those who remained. When coal owners closed a colliery in 1925 (rather than allow existing practices to continue) miners responded by taking control of the local town for several days until police were able to re-establish authority (Hywel, 1973). As conditions in the mines deteriorated, the Trades Union Council (which represented all trade unions in Britain) called a general strike in 1926 to defend the miners (Renshaw, 1975). It took just nine days for the strike to collapse, but the impact on mining communities in South Wales was profound. The already strong social cohesion of colliery communities was increased and became inextricably linked to a form of class struggle whose consequences were to be felt until the 1980s.
Between 1921 and 1936, 241 mines in South Wales closed and the number of miners fell from 270,000 to 130,000 (see Figure 4). The impact of the depression decimated every facet of life in the coalfield, resulting in three hunger marches from South Wales to London in 1927, 1934 and 1936.

2.2 The Second World War and Post-War Reconstruction

Rearmament and the Second World War dramatically increased the demand for coal, and wages gradually rose. The government took control of mines in 1942 to boost production, and full nationalization—under a “National Coal Board”—became Labour Party policy and was duly introduced in 1947 following the Party’s victory in the 1945 election (Millward & Singleton, 2002). As a result of nationalization, pits were updated, wages increased and working conditions improved. Coal remained in demand, and annual output from mines in South Wales reached 24 million tonnes in 1952 (Government of Wales Statistics & Research, various dates). However, over the course of the 1950s increased use of oil, gas and nuclear as energy sources, and the limitations placed on coal use by the 1956 Clean Air Act, led to declining demand for coal and an impetus to close uneconomic pits (Curtis, 2013). Between 1953 and 1959, 25 coal mines closed in South Wales, and the number of jobs fell by over 15,000, or 14 per cent of the workforce (See Figure 5). In the early 1960s, policy focused on closing the small uneconomic mines and concentrating resources on fewer and larger pits and between 1960 and 1965, 35 collieries closed with the loss of 15,000 jobs. However, increased investment in Wales had brought with it manufacturing and steel-working jobs and miners generally had no problem securing alternative employment; indeed, given relatively low wages and an insecure future, many miners chose to exit the industry (Curtis, 2013). Consequently, industrial action in the face of these closures was relatively muted in the 1950s and into the early 1960s.
Despite the election of a Labour government in 1964, the program of pit closures continued, accelerated by a further drop in demand precipitated by the discovery of North Sea oil. The National Union of Mineworkers, supportive of the Labour government, elected to mitigate the effects of this closure rather than challenge the policy altogether. However, increasing dissatisfaction among the membership led to spates of industrial action throughout the 1960s. However, over the course of the 1960s, were 50,000 job losses in South Wales mining and a fall in the number of collieries from 121 to 52 (See Figure 5).

### 2.3 Growing Unrest

Whereas the National Union of Mineworkers’ leadership was resigned to the contraction of the industry, many South Wales Lodges retained their radicalism and opposition to pit closures—they were more than ready to confront the new 1970 Conservative government in defence of the industry. A strike over wages in the early years of the 1970s quickly collapsed due to the lack of national union recognition, but the radicalism of South Wales’ miners reached new heights (Curtis, 2013). The government, meanwhile, pursued its Industrial Relations Bill which sought to reduce trade union power (Whittingham & Towers, 1971).

The National Union of Mineworkers declared an official strike in early 1972 which, with the aid of the transport unions, quickly succeeded in paralyzing the production and movement of coal across Britain. A Court of Enquiry recommended substantial wage increases for miners, and the strike ended in victory and a brief reaffirmation of the continuing importance of coal (Phillips, 2006).

However, the improved wages expected from the 1972 strike failed to materialize, and continued pit closures led to a haemorrhaging of mine workers from South Wales’ collieries, with employment falling by 10 per cent (from 40,000 to 36,000) between 1970 and 1972. Miners introduced an overtime ban as a challenge to government pay restraint policies, which rapidly resulted in coal rationing. This coincided with an increase in oil prices caused by the Yom Kippur war which led to electricity cuts, a declaration of a government state of emergency and a three-day working week (National Union of Mineworkers, n.d.). The government was obliged to call a General Election to endorse its draconian handling of the strike, and lost. From this point onwards the problem of union
power became a central issue in British politics, and miners from South Wales were regarded as the primary protagonists (Richards, 1996).

The position after 1974 was improved by the official position of the new Labour government. Many collieries were upgraded, technological improvements were introduced and new coal seams exploited. In South Wales only a handful of collieries pits closed and these were for good reason and uncontested. The introduction of the Coal Mines (Respirable Dust) Regulations 1975, led to an improvement in the health of miners, and those suffering from pneumoconiosis due to the inhalation of coal dust were compensated (McIvor & Johnston, 2016). Voluntary early retirement schemes were introduced and pension provisions improved. The social fabric mining areas was strengthened, and union membership increased as miners returned to the industry.

The new Labour government wished to expand the role of the coal industry in delivering energy independence and improved many collieries. However, it soon struggled with the challenging economy and proposed a “Social Contract” to contain wages to support its economic policies (Martin, Sunlep, & Wills, 2012). This stretched—but did not quite—break the relationship between the National Miners Union and the Labour government, but South Wales miners persistently voted against the social contract and in favour industrial action not least because in the face of declining profitability, and the future of the industry again looked bleak.

2.4 Recession, Confrontation and Closure

The recession of the 1980s was the worst in Britain since the Great Depression of the 1930s. Unemployment tripled, from one million to over three million workers (Office for National Statistics, n.d.). Acts of Parliament clipped union bargaining powers and restricted the legality of strike action. Government support for the industry fell away, productivity declined, pits increasingly encountered coal seams that were difficult to exploit and colliery closures began again (see Figure 6). The government accepted a Commission report to close 27 out of the remaining 33 collieries in South Wales and put an embargo on hiring (Gudgin, 1984).

![Figure 6. Production, Employment and Total Number of Collieries in Wales (1974-96)](source: Government of Wales, 1998.)
South Wales miners voted for immediate strike action which took the government by surprise and, realizing the low level of U.K. coal stocks, it retreated from confrontation and adopted the gradual approach of withdrawing investment from the mining industry, reducing manpower and relying on economic pressures to close collieries one by one. At the same time it redirected its national energy policy away from coal and toward nuclear power, building up coal stocks in anticipation of a future showdown with the mineworkers unions (Pearson & Watson, 2010).

A Conservative government was returned in 1983 and the National Coal Board launched a determined program of pit closures. In March 1984, the National Union of Miners, confronted with the end of coal mining in Britain, called a national strike to secure the future of the industry. Thousands of miners picketed the more reluctant collieries to join strike action. The police undertook surveillance and road blocks to halt “flying pickets” reaching electricity generating plants, and confrontations on picket lines became violently ugly (Phillips, 2016).

One coal mining area in northern England, Nottinghamshire, refused to join the strike, as did South Wales’ steel workers, and these blows to unity were accentuated by the large reserves of imported coal stockpiled by the government and replenished through small ports around Britain. At one coke works, Orgreave, 6,500 miners, including 1,000 from South Wales, clashed with 4,000 police in a brutal and uncontrolled brawl, and violence reached a level unprecedented in Britain’s industrial history (National Coal Museum, 2009).

The government removed welfare benefits from strikers, offered a bonus to those willing to return to work, and secured a High Court order banning picketing at a South Wales steelworks. The National Union of Mineworker’s bank account was frozen and South Wales’ Lodges rushed to safeguard their funds. Although very few miners from South Wales returned to work, the strike collapsed at the national level (Curtis, 2013; Phillips, 2016). The ensuing program of colliery closure rapidly ended coal mining in South Wales, and by 2003 the United Kingdom had become a net importer of coal.

This very brief history of the South Wales coal industry shows its rapid growth and gradual collapse. It illustrates the all-important impact of global economic pressures on the sustainability of mining and the political struggle to limit union activism. In these circumstances, the long-term strategies to support, save or manage the decline of the industry proved fruitless. The final closure of collieries had a heavy and detrimental impact on the prosperity, health, and well-being of those remaining in the Valleys which Fothergill (2008, p. 3) describes as “one of the most intractable development problems of any older industrial area in the whole of Britain.”
3.0 The Social Impact of Mine Closure

As might be expected the social impact of the closure of mining in South Wales was profound, and this impact persists, despite being repeatedly addressed over the last 30 years by all levels of government and civil society.

Five factors in particular have characterized the persistent challenge of economic and social regeneration in The Valleys;

- Outmigration
- Educational attainment and skills acquisition
- Health and well-being
- State welfare support
- Housing

3.1 Outmigration

The population of the Valleys has always fluctuated significantly, depending on the economic performance and profitability of the mines. Between 1851 and 1911 it is estimated that 366,000 people moved into South Wales due to the growth of coal mining, first from rural Wales and then from England, Ireland, Italy and Spain. In the two Rhondda valleys, the population stood at just 1,998 in 1851. By 1911 it had risen to 152,781 and by 1921 the South Wales coalfield employed 250,000 men (Bloor, 2002). The flow was reversed between the wars due to the Great Depression, and from 1950 onwards the outmigration continued, primarily among those with the skills and ability to command the highest wages, leaving behind those with fewer or no skills.

In recent years the population has stabilized—and to a small degree increased—in the mouths of the Valleys where access to employment in the city of Cardiff and the coastal plain is easiest. However, depopulation has continued in the Heads of the Valleys, albeit at a slowing annual rate. This population loss is centred on the departure of those aged up to 24 and between 40 and 49, who constitute a major portion of the employable workforce (Foden, Fothergill, & Gore, 2014). Accordingly, the challenge is to generate enough employment to retain a population size that does not fall below the tipping point at which the local economy is no longer sustainable and a spiral is generated in which economic collapse and social deprivation outstrip the resources and capacity to adequately respond.

To date, regional policy objectives to generate new business and employment throughout the Valleys have not succeeded in counteracting the loss of employment or staunching overall population decline. There remains a need to precisely target communities and ensure that they benefit from strategic regional policy.

3.2 Educational Attainment and Skills Acquisition

Historically, South Wales’ coal mining communities had a high reputation for self-improvement and education, using libraries and study rooms built and run by local Union Lodges (Egan, 1987). Education was seen as a means of personal betterment, providing the best and only means of avoiding working at the coal face. Although these aspirations have declined in importance, it is still the case that those who achieve qualifications are those most likely to leave the Valleys in order to secure employment and improved opportunities overall.
Young people in the Valleys perform less well than young people elsewhere in Britain, but academic success necessarily turns the sights of high achievers beyond the confines of home (Foden, Fothergill, & Gore, 2014). Accordingly, the Valleys have a high proportion of workers with few or no formal qualifications and a correspondingly high proportion of the population engaged in manual occupations, which reflects the low economic base of the area and the existence of fewer job opportunities and diminished expectations.

The Welsh government has adopted numerous measures (in part funded by the European Union), designed to counter the consequences of child poverty and poor educational performance through pre-school provision, improving teaching for 14 to 19 year olds, and engagement with young people through mentoring (Egan, 2013).

In 2000 The University of Wales established the Community University of the Valleys delivering higher education courses on three sites in the heart of the Valleys designed to be easily accessible and to attract students who would otherwise be unable or disinclined to take their education further (Cook & Rushton, 2009). The greater connection between universities in Wales and manufacturing, information technology and innovation has proved to be successful but has not noticeably affected the Valleys because of their distant location and the educational attainment of levels of those living in the Valleys.

Links between education and further education, industry and civil society are regarded as increasingly important in connecting opportunities for personal development to academic and vocational achievements leading to employment.

### 3.3 Health and Well-Being

Much has been written about the health and well-being of South Wales’ miners and their self-help clubs that eventually led to the formation of the National Health Service (see, for example, Jewell [2007] and Tudor Hart, [2010]). Yet in the Valleys life expectancy is currently lower, and the incidence of ill health is higher, than elsewhere in Britain and compared with all other former mining regions in Britain.

The prevalence of poor health is illustrated by the numbers claiming Disability Living Allowance (DLA) a benefit provided to offset some of the costs of care and mobility. DLA is paid to those in work and those not working, and to those of pensionable age. In 2013 10.7 per cent of the South Wales population were recorded as claiming DLA (Gore et al., 2014). The reason for this is the residual prevalence of heart disease, respiratory illness, mental ill health, back pain and arthritis within the coal mining community. However, poor health now extends beyond former miners to subsequent generations, and here the connection must be made with the poverty and deprivation that persist in the Valleys.

During the 1970s and 1980s considerable emphasis was placed on health promotion (Michael, 2008). With devolution and the establishment of the Welsh Assembly, attention shifted to health inequalities and encouraging better lifestyle choices as part of a strategy to confront the escalating cost of health services and the contraction in government funding. Nevertheless, the health of residents in the Valleys continues to be a severe and persistent challenge. Figure 7 represents the total social expenditures by the Welsh Government between 1981 and 1995, compared with the evolution of the population in the same period, showing the increase of the social spending.
3.4 State Welfare Support

A compulsory national health insurance scheme has existed in Britain since 1911 and it has expanded ever since becoming fully government-funded in 1931. (Thane, 2011). Since then the welfare system has been transformed many times, and now supplements the income of those without employment, those unable to gain employment, those in low-paid employment, and those incapable of sustaining employment due to illness, injury or other circumstances.³

Identifying and tracking the annual contribution of welfare benefits to any one area, such as the Valleys, is not possible primarily because of changes over time in the definition of those entitled to receive benefits and the amounts of benefits available. Benefit reforms introduced in 2012 in Housing Benefit, Disability and Incapacity benefits, Child Benefit and Tax allowances make any such assessment extremely difficult (Feikert-Ahalt, 2012). However, it is revealing that recent reductions in welfare benefits are adjudicated as likely to remove almost £430 million a year from the economy of the Valleys (and an average of £670 a year for every adult of working age)—four times the annual EU budget for regional development allocated to the whole of Wales (Beatty & Fothergill, 2014), an observation that illustrates the continuing contradictions within government policies toward the Valleys.

Whatever the figures, the importance of welfare benefits to those in the Valleys cannot be over-emphasized. Many unemployed miners in the 1980s decided to take early retirement or to claim Sickness Benefit, and in time they received their state pension. Younger miners became economically inactive, and many ended up on benefits (Beatty, Fothergill & Powell, 2007). Overall, barely half of the coal mining jobs lost in the last 30 years in South Wales had been replaced by 2008, despite the many and various attempts to reconfigure and revive the local economy, hence the continuing importance of welfare support to individuals and the local economy as a whole (Foden, Fothergill, & Gore, 2014)

³ There is no single definition of “welfare benefits.” In 2015/16 the UK government spent £217 billion on core benefits including: £92.1 billion on the State Pension, £36.7 billion on disability benefits, £20.9 billion on child and working tax credits, £26 billion on housing benefit, £11.7 billion on Child benefit and £2.4 billion on Unemployment benefit (Fullfact.org, n.d.).
3.5 Housing

Providing and maintaining adequate and good-quality housing underpins strategies to tackle poverty and maintain a population level sufficient to sustain and grow the local economy. In 1975 the National Housing Condition Survey showed that a quarter of houses in the Valleys were built by mine owners before 1870 during the rapid expansion of the mining industry, and half were built before 1914. All were built to very basic standards entirely unrelated to regulations adopted for houses built after 1945 (Doling & Thomas, 1982). However, over the years many small terraced houses have been purchased and steadily improved and extended, and now constitute sound low-cost owner-occupied housing for the majority of those living in the Valleys.

It was not until after the First World War that the poor condition and lack of housing became an issue in Britain, and the government empowered local authorities to build rental houses under the provisions of the 1919 Housing and Town Planning Act. This coincided with economic depression in the Valleys and little changed, although large cities in Britain embarked on slum clearance programs and “Council House” building (James, 2014). It was not until after the Second World War that council houses were built in significant numbers in South Wales and many remain, notwithstanding their enforced sale during the 1980s (Institute of Welsh Affairs, 2006). Those remaining in local government ownership are now subject to significant upgrading to new standards set by the Welsh government, a program that provides training and employment opportunities in the community.

In the late 1960s estates of system-built flats were constructed, some of which were on exposed and inaccessible mountainsides. They soon became highly unpopular and attracted a very poor reputation as housing the most deprived citizens and families with difficulties. Many have been demolished while others have been refurbished. Housing Associations have now taken over ownership and management of much of the public housing stock and are able to follow a more holistic approach to housing and renewal.
4.0 The Impact of Regional Policy.

Between the wars the devastation caused by industrial change and collapse fell heavily on the South Wales coalfield, but the government left such regions to address their problems with minimum direct government intervention. By the mid-1930s, however, these laissez faire principles became untenable (Rowlands, 2002), and positive efforts were regarded as necessary to generate alternative industries where working collieries once stood (Community Development Projects, 1977). The regional policies adopted since 1934 are summarised in Table 1.

<table>
<thead>
<tr>
<th>Policy / Scheme</th>
<th>Year</th>
<th>Government</th>
<th>Main objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Transfer Board</td>
<td>1934</td>
<td>Labour</td>
<td>Provide retraining, grants and loans for miners wishing to move south</td>
</tr>
<tr>
<td>Special Areas (Development and Improvement) Act</td>
<td>1934</td>
<td>Labour</td>
<td>Job creation by improving infrastructure and encouraging industrial development</td>
</tr>
<tr>
<td>National Plan</td>
<td>1960s–1970s</td>
<td>Labour</td>
<td>Tax incentives, subsidies and grants designed to support new and relocating firms and increase employment</td>
</tr>
<tr>
<td>Establishment of the Welsh Office</td>
<td>1964</td>
<td>Labour</td>
<td>Assumed responsibility for the promotion of industry</td>
</tr>
<tr>
<td>The Valley’s categorised as Special Development Areas and Regional Employment Premium (REP)</td>
<td>1967/68</td>
<td>Labour</td>
<td>Promote development and subsidize labour for companies in these areas (REP)</td>
</tr>
<tr>
<td>Community Development Project Programme</td>
<td>1969</td>
<td>Labour</td>
<td>Promote development by supporting poor communities</td>
</tr>
<tr>
<td>Decentralization of government offices away from London to regional conurbations</td>
<td>1974</td>
<td>Labour</td>
<td>Foster development and employment in peripheral depressed areas</td>
</tr>
<tr>
<td>Establishment of the Welsh Development Agency (WDA)</td>
<td>1976</td>
<td>Labour</td>
<td>Promote development</td>
</tr>
<tr>
<td>Publication of White Paper on Regional Industrial Policy</td>
<td>1983</td>
<td>Conservative</td>
<td>Promotion of greater cost efficiency and redirecting attention toward job creation attached to capital projects</td>
</tr>
<tr>
<td>Cardiff Bay Development Corporation</td>
<td>1987</td>
<td>Welsh Government</td>
<td>Deliver solutions on a wider scale to areas with greater critical economic mass</td>
</tr>
<tr>
<td>Valleys Initiative Regeneration Programme</td>
<td>1989</td>
<td>Welsh Government</td>
<td></td>
</tr>
<tr>
<td>Communities First Programme</td>
<td>2001</td>
<td>Welsh Government</td>
<td>Foster grassroots community development to combat poverty</td>
</tr>
<tr>
<td>The Heads of the Valleys Programme</td>
<td>2006</td>
<td>Welsh Government</td>
<td>Exclusively directed toward former mining communities</td>
</tr>
<tr>
<td>Jobs Growth Wales</td>
<td>Ongoing</td>
<td>Welsh Government</td>
<td>Foster employment by providing six-month placements with firms at the minimum wage</td>
</tr>
</tbody>
</table>

The Labour government of 1934 established the Industrial Transfer Board to provide retraining, grants and loans for miners wishing to move south. Across Britain over 200,000 people relocated over the next 10 years, but financial support was minimal (£12 for a family with six children plus removal expenses, equivalent to approximately £780 in 2016). In South Wales the take up was relatively low and four training camps were established to retrain young men. They were located in very isolated rural areas far away from the Valleys and the temptations of towns, and became so unpopular that they were eventually closed (Hill, 2003).
A more important government intervention to bring jobs to the Valleys rather than relocating workers to areas of higher employment was the 1934 Special Areas (Development and Improvement) Act (Turvey, 1991). The Act provided for the appointment of Commissioners with the power to improve the infrastructure and acquire land for industrial development. Estate companies were established to build factories and to direct financial aid to industry in the form of rates, rent and income tax relief and loans (Cullingworth, 1999). In reality the impact of these measures was very modest in South Wales, but the same approach of providing incentives for industrial diversification continues to the present day.

After the War the government introduced a requirement for an Industrial Development Certificate (IDC) to be secured for the location of any new factory. IDC approvals favoured areas of higher unemployment; however, although the principle was sound, it was a cumbersome and ineffective tool for regional development (Ashcroft & McGregor, 1989). The post-World War Two boom relieved unemployment and collieries, including those in South Wales, began to prosper—the instruments of regional policy fell into misuse until unemployment rose again in the mid-1950s when regional policy was reactivated.

Labour governments during the 1960s and 1970s introduced a National Plan with tax incentives, subsidies and grants designed to support new and relocating firms and increase employment. These were regularly introduced, revised and replaced, but overall proved beneficial in South Wales. In 1964 the government established the Welsh Office, a new department of government with a cabinet-level Minister, which assumed responsibility for the promotion of industry, and in 1967/68, a number of Special Development Areas were announced, including the South Wales' valleys, which carried with it a Regional Employment Premium (REP) as a labour subsidy for companies in these areas.

As economic conditions in the Valleys continued to deteriorate over the course of the decade, the government issued a White Paper (Wales–The Way Ahead) that sought to identify measures to address this decline. The White Paper, however, reflected a fundamental contradiction that had steadily emerged since 1946, namely that while there was a very obvious need to support former mining communities to adapt and reformulate their local economies, it was equally clear that the geography of the Valleys was so difficult that inward investment and job creation could only succeed if located at the mouths of the Valleys and not in the Valleys themselves. This meant building starter units and new premises for manufacturing plants in the southern coastal strip and along the M4 motorway. As a result the Valleys lost out and received only secondary help and benefit.

A government initiative that illustrated the significant difficulties of renewing communities—but this time from the bottom up—was the (1969) Community Development Project Programme which assumed that the deprived members of these areas were the cause of their own deprivation, and that progress would be made if they could be engaged and turned away from their “apathy” toward self-help. The Programme that was opened in the Valleys (at Glynocorwg) soon recognized, like the other 11 across Britain, that the cause of poverty was determined by macroeconomic factors and not by any problems of the communities themselves (Dennis & Clout, 1980).

The Conservative government of 1970 denounced interventionist regional policies but rising unemployment and the deepening recession forced its hand and it was obliged to support larger employers (Howarth, 1983). The returning 1974 Labour government introduced a policy to disburse central government offices away from London to regional conurbations (following the successful relocation of the Royal Mint from London to north Cardiff in 1968) and to increase support where there was a high level of poverty, which in effect covered 20 per cent of the British population and all coal mining areas including South Wales (Howarth, 1983).
The economic recession experienced by Britain in the 1970s and 1980s produced redundancies in the factories that had been built to counter unemployment by previous rounds of regional policy. The shortfall in jobs in the Valleys has never been overcome notwithstanding outward migration and commuting to jobs in Cardiff, Swansea and Newport and their hinterland.

In 1983 the government published a White Paper on Regional Industrial Policy requiring greater cost efficiency and redirecting attention toward job creation attached to capital projects (Young, Hood, & Hammill, 2017). This was followed by a recalibration of regional policy to take into account management training, supporting small and medium enterprises, and the provision of business and innovation grants.

At this time, tackling poverty in Wales became synonymous with what was regarded as a growing “democratic deficit” which, despite the establishment of the Welsh Office, was felt to increasingly frustrate economic revival and social cohesion. A referendum on devolution for Wales was held in 1979 and failed to pass, but another in 1997 narrowly succeeded and led to the formation of the National Assembly of Wales (McAllister, 1998).

The renewed efforts of the Welsh Assembly Government were complemented by numerous Welsh advisory and renewal bodies, including Cardiff Bay Development Corporation (1987) and the Valleys Initiative Regeneration Programme (1989). Although Wales certainly benefited from these schemes, and the Valleys indirectly benefited, the very particular needs of former mining communities became increasingly subsumed into what was rather nebulously identified as the “South East Capital Region” (Welsh Assembly Government, 2008). This concept was used in the Assembly Government’s Spatial Plan, and was later driven by EU and governmental pressures to deliver solutions on a wider scale to areas with a greater critical economic mass. Unfortunately, approach further relegated the particular character and needs of areas such as the Valleys and perpetuated their isolation by diverting attention away from them and their continuing disadvantages (Industrial Communities Alliance, 2015).

The lack of effective renewal in the Valleys had increasing local political consequences, and locally based measures were regarded as necessary. Accordingly, in 2001 the Welsh government established the Communities First Programme, reviving the notion that grassroots community development could make a significant difference in combating poverty. It set up 52 neighbourhood-based partnerships with existing community organizations in support of the most vulnerable; however, the Programme proved to be costly and was reduced in scale, although it still exists.

An example of government investment being directed to South Wales but outside the Valleys was Cardiff Bay Development Corporation, which was commissioned to build a barrage across the mouth of Cardiff Bay to increase the land values of abandoned docks and thereby renew the waterfront. This had no discernible impact on the Valleys and generated considerable disapproval from its communities and politicians. A later initiative, The Heads of the Valleys Programme (2006), was exclusively directed toward former mining communities in the most remote portion of the Valleys and was tasked with a complete agenda for renewal to be delivered in partnership with local authorities and community organizations (Welsh Assembly Government, 2006). However, it was allocated a minimal budget of just £10 million a year, and its achievements were limited by its structure and resources (Bevan Foundation, 2009). Its intended 15-year lifespan was cut short by the Welsh government in 2014.

A key measurement of the success or failure of regional policy is the share of the job shortfall for men that regional intervention is able to eliminate (Osmond, 2008). In the Valleys this figure was always disappointing. In addition, the replacement jobs were not necessarily of equal value to those

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4 Between 1981 and 2004 5,200 non-coal related replacement jobs are recorded as having been generated, just 19 per cent of a full replacement target and the lowest percentage among all British coalfields.
lost (Beatty, Fothergill, & Powell, 2007). Miners were regarded as well-paid manual workers and alternative part-time or full-time jobs in factories or call centres could not be regarded as providing equivalent employment. In addition, new jobs accessible from coal mining areas were increasingly available to men and women, and whereas former miners were reluctant to do work that they did not regard as appropriate, younger miners and their wives did not share their attitude (Beatty, Fothergill, & Powell, 2007).

It is not possible to determine with precision to what extent local circumstances in the Valleys were impacted by variations in national economic growth as opposed to Regional policy and renewal initiatives designed to activate revival. More will be said about the efforts of the Welsh Development Agency and the contribution of European Union funding. What is apparent is that the South Wales coalfield has not managed to progress as successfully as other mining areas in Britain due to its inaccessible geography and the failure to establish an alternative economic base within its mining communities or within easy reach of their diminished population.

The current approach to regional development is based on the belief that the national economy is the key to future prosperity and this might—but only possibly—eventually lead to increased industrial investment and employment in the Valleys. Locally, the emphasis can only be on encouraging local procurement and supporting small and medium-sized enterprises (SMEs) while endeavouring to increase educational attainment and improved skills. The “Jobs Growth Wales” program provides six-month placements with firms at the minimum wage, and is proving to be beneficial. There is some recognition that the Valleys has significant potential to generate wind power from which local communities might benefit, but there is significant local opposition in the Valleys to turbines located on hillsides. There are currently no major planned infrastructural projects that would have a direct and transformational impact on the Valleys, and the investment in upgrading public housing is the only initiative with the potential to deliver local economic added value. The Industrial Communities Alliance (2014), a pioneering body representing local authorities in industrial areas across Britain, advocates the reinstatement of Enterprise Zones similar to those in the 1980s to provide incentives for new companies to locate to the Valleys, but the likelihood of this idea gaining traction is low because of the current absence of a strategic and funded program to regenerate the Valleys.
5.0 Economic Regeneration and the Contribution of the Welsh Development Agency (WDA), European Funding and Non-Governmental Organizations

5.1 The Welsh Development Agency

In the 1970s political interest grew in the establishment of an agency explicitly charged with overcoming the impact of unemployment caused by the collapse of coal mining, the parallel rundown of agriculture and the contraction of the fishing industry in Wales. The idea found expression in the Labour Party’s October 1974 manifesto as part of its industrial strategy and was implemented following election victory (Eirug, 1983).

The Welsh Development Agency (WDA) was based on economic regeneration delivered through specific industrial sectors (food, the motor industry, new technology etc.), and was charged with promoting industrial efficiency and competitiveness, safeguarding and generating employment and improving the environment. Initially it saw itself as doing this by drawing up a comprehensive economic and industrial strategy for Wales in consultation with local authorities, but this conflicted directly with the role of the Welsh Office (run by the central government) and the confusion around the roles of each was contested for several years. Eventually the WDA became what is best described as “an industrial property developer: a kind of merchant bank-cum-investment house: and a major land reclaimer” (Powell, 1979).

The WDA was charged with both safeguarding and generating employment while securing a minimum return on business investment of 15 per cent. Local political and community interests were always in favour of intervening to save small firms despite their questionable prospects, but the WDA sought only to support businesses with long-term futures that could provide stable employment. It provided loans, joint loan and equity investment, and equity purchase amounting to £24.3 million in its first three years (Eirug, 1983).

In 1981 the WDA was appointed as an agent of the European Coal and Steel Community with a £5 million loan facility over three years (Council of the European Union, 1981). This enabled small firms in Wales to borrow up to £50,000 at 10 per cent a year which was important because of the high incidence of small businesses employing 50 or fewer workers. The overall impact of these measures on unemployment can be regarded as valuable but insufficient to stem rising unemployment rates in Wales which rose by 133 per cent—from 77,000 to 180,000—between January 1976 and September 1982. The Valleys fared even worse (Office for National Statistics, n.d.).

The WDA concentrated its greatest efforts on continuing an existing government program of land reclamation of derelict colliery sites (almost 1,700 acres) (Eirug, 1983). Old pits were cleared and landscaped for development and advance infrastructure and factory buildings were built, which transformed the topography of the South Wales coalfield. In its first three years (1976 to 1981) the WDA spent on average 17 per cent of its budget on land reclamation and an average 72 per cent on industrial sites, premises and infrastructure (Eirug, 1983). Over time it built an increasing number of smaller units in support of local companies and smaller inward relocating firms.

However, by 1982 the 812 advance factory units built by the WDA (it actually owned 1,225) were in 100 locations that did not coincide with the areas of greatest unemployment, i.e., the Valleys. Rather, they were constructed either at the mouth of former mining valleys or close to the motorway (M4) and key communication routes (see Figure 8 for distribution between South Wales and the rest of the country). Critics of the agency claimed that the location of units was having insufficient impact.
on former coal mining communities, and many units remained or became vacant. In 1982 only 40 per cent (348) of WDA units were tenanted and only 5,125 people were employed in them (Hansard, 1982). However, it has since been recognized that the construction of advance factories did have an invaluable impact on the most deprived areas and became invaluable in later efforts to attract inward investment.

Figure 8. WDA: Advance Factories Completed (Selected Years)

The 1980 Select Committee on Welsh Affairs expressed concern that there were still no fewer than eight bodies in Wales charged with addressing unemployment; the WDA, Development Board for Rural Wales, Welsh Office [Industry Department], Manpower Services Commission, Land Authority for Wales, British Steel Corporation, local authorities and the European Community (HM Parliament, 1980). The result was the persistent absence of a truly integrated economic development strategy for Wales and a more disjointed approach to economic regeneration than might otherwise have been achieved.

Where the WDA is regarded as having excelled in the 1980s and 1990s was in securing inward investment. Between 1983 and 1991 it secured investment totalling over £4 billion, including Sony and Align-Rite (to Bridgend), Bosch (to Cardiff), and Hitachi (to Hirwaun), and numerous companies in the automotive components sector; Ford, Toyota Rover, Jaguar, Mercedes and BMW, and in the electronics sector such as Panasonic (WDA, 1991). It attracted the maintenance facilities of British Airways to Cardiff Airport and supported Admiral Insurance plc to locate in Wales. It invested in the building of the Cardiff Millennium Stadium and the National Botanic Gardens of Wales, but here again the impact on the Valleys was modest.

In 1992 the WDA Chairman and a number of Directors were condemned by the Government Public Accounts Committee for numerous financial irregularities and relations between the Welsh Assembly and the WDA deteriorated, resulting in its sudden merger with the Welsh Assembly Government in 2006 (Halkier, Danson, & Damborg, 2002). Key staff left the merged body—removing the expertise and institutional memory necessary to continue its functions—and the agency was in effect dismembered. The House of Commons Welsh Affairs Committee (2011) published a report on the closure of the WDA expressing grave concern at the reduced performance of economic renewal in Wales since the winding up of the agency.
Care needs to be taken in an assessment of the WDA’s success during its 30-year existence in relation to its impact on the Valleys. It did build advance factory units in support of inward investment and renewal but these were primarily located just outside the Valleys or far beyond them. The impact on opportunities in the Valleys was, however, marginal. Infrastructure projects were also geared primarily to South East Wales, and hence it is difficult to identify the impact of regional policies delivered by the WDA to any strengthening of the Valleys’ economy.

The Welsh government was not able to replicate the success of the WDA after 2006 (Great Britain Parliament: Welsh Affairs Committee, 2012). For example, investment from a major inward funder, Korea’s Lucky Goldstar (LG) electronics manufacturer, originally attracted by the WDA, failed to materialize and firms previously attracted to Wales began to leave as a result of greater inducements and lower wages elsewhere (Cato, 2004). In recent years the Welsh government has relied on supporting the 22 local government areas to deliver economic and social renewal programs in part because public funds have shrunk drastically and because it no longer has the manpower or expertise to devise or orchestrate major renewal projects.

5.2 European Union Funding

European structural funds have supported economic development across EU member states and their constituent regions since the 1970s with the aim of reducing economic and social inequalities between the EU’s regions and nations. They are composed of five funds; the European Regional Development Fund (ERDF), European Social Fund (ESF); Cohesion Fund; European Agricultural Fund for Rural Development; and European Maritime and Fisheries Fund (EMFF) (Sheffield Political Economy Research Institute [SPERI], 2016). The majority of EU structural funds to the United Kingdom are from ERDF and ESF. A number of specialist programs are available; to increase business competitiveness with assistance to; improve access to finance and markets (COSME); to provide opportunities to teach, study and volunteer abroad in Europe (Erasmus), and to employment, social policy and labour mobility across the EU (Programme for Employment and Social Innovation [EaSI]), etc.

Structural Funding is allocated to projects in seven-year funding rounds to regions of member states that are categorized according to their per capita gross domestic product. In the case of West Wales and the Valleys, no fewer than three cycles of funding amounting to £5.19 billion has been allocated since 2000 (Dickins, 2016). This repeated entitlement of the Valleys illustrates its continuing deprivation and the lack of progress made toward economic transformation.

Over the years, there have been hundreds of extremely varied EU-funded projects under numerous EU programs. They include: the Working Skills for Adults Scheme (£2.7 million) to develop new skills and improve career prospects of 1,700 people in the Valleys; Bridges Into Work Scheme (£5.5 million) to support 2,000 out-of-work residents of the Valleys by providing training and mentoring; Refurbishment of Merthyr Tydfil Town Centre (£6.6 million); Torfaen Business and Innovation Centre (£1.7 million) to support new businesses; and upgrading the Heads of the Valleys road (£79 million) to improve travel times and open up land for new start-up businesses and increased employment opportunities.

From the commencement of the 2007–2013 programs to the end of February 2016, EU projects funded through ERDF in Wales are estimated to have created 36,970 new jobs, strengthened 11,900 new businesses, helped 72,700 people into work and supported 229,110 people to gain qualifications (Welsh European Funding Office, 2016). However, inconsistent project oversight and reporting has given rise to challenges over such figures, and it is generally acknowledged that funds were directed toward large prestige projects that did not maximize the generation of employment opportunities, and

For a full list see Welsh Government, 2016.
that insufficient investment was directed toward Valley communities to encourage economic activity. As a result, the public perception in Wales of the use of EU funding was always poor, and in 2016 the result was a strong vote in the Valleys to leave the EU.

5.3 Non-governmental Organizations

Very little research has taken place on the contribution of civil society to renewal in the Valleys. Historically, the strength of the community was central to sustaining the health and well-being of its members. Today the chapels, miners’ institutes and welfare buildings that made up this extensive pattern of faith and mutual support lie derelict or have been converted into living accommodations or warehouses. Community cohesion has become splintered along the line of past union activism, the separate villages in which people live, and particularly along generational lines, with antagonism between the elderly and the young (Bennett, Beynon & Hudson, 2000). Such dysfunction makes united community action difficult to initiate and sustain, and what initially succeeds can become complicated by local rivalries and competition for resources.

Regional policy, so far as it supported the renewal of the Valleys, was concerned with pit clearance and the construction of small business units and not strengthening the social fabric through community projects. European Social Funds have been available for specific interventions, but Valley communities have not proved adept in organizing, planning and generating projects sufficiently to secure such funds. Many community groups that were able to renovate buildings for community use and youth schemes under the governments Urban Aid Programme (1968) subsequently faltered because of the reduction in funding sources and a failure on the part of small mining communities to sustain them.

A Coalfields Regeneration Trust covering all former mining communities in the United Kingdom was established in 1999 and has since supported small scale community projects in mining areas with a United Kingdom budget of £4.7 million (UK Charity Commission, 2016) (2014/15); however, although this has been a rare source of funding for community groups in the Valleys, its impact has been valuable in encouraging self-help but negligible in terms of economic transformation.

The Heads of the Valleys Programme mentioned above did support a small number of high-end community initiatives such as Rhondda Life (Rhondda Life Limited, 2015)—the building of a complex of facilities designed to employ local people from the Valleys and provide employment in the tourism industry. However, political priorities changed, revenue commitments were redirected and Rhondda Life, like other community-based initiatives fell victim to wavering political support and the lack of civil service expertise. The Heads of the Valleys Programme was “subsumed” into another initiative entitled “Vibrant and Viable Places” with a reduced budget directed toward the physical refurbishment of town centres by local authorities.

In the Valleys some community groups have sought to address local problems, particularly around youth disillusion and drug abuse, and the health and well-being of the elderly. Few have attempted to address underlying economic problems by delivering training and employment and generating job opportunities. Most funding programs have failed to incorporate robust mechanisms for consultation and participation and have tended to relegate community initiatives below statutory economic development projects. The lack of a broad long-term (and coherent) economic and social renewal strategy for the Valleys has made it uncertain how and where civil society can contribute to addressing the persistent challenges of poverty and deprivation (Bennett, Beynon, & Hudson, 2000).
6.0 Lessons Learned From the South Wales Coalfield

The lessons learned from South Wales can be usefully identified under four distinct headings; Strengthening the local economy; enhancing community cohesion and support for economic transformation; improving the physical infrastructure and environment, and delivering policies and practices.

6.1 Strengthening the Local Economy

6.1.1 Ensuring That Strategies and Interventions Are Specifically Directed Toward Designated Target Areas

Regional policy in Britain has always been directed toward large regions, and, while it was always intended to benefit small former coal mining areas such as the South Wales valleys, interventions in Wales were not specifically targeted at them. As a result, investment was too frequently not to the benefit of the Valleys, supporting job opportunities that, because of inadequate public transport, could not be accessed by those living there, and particularly by those in the Heads of the Valleys. The most prominent example of this was the construction of industrial units for new manufacturing and inward investment being located at the mouths of the Valleys rather than in their heart. This problem was mirrored in the use of EU-funded programs that, although concerned with addressing the economic problems of the Valleys, found it difficult to locate initiatives within these communities.

6.1.2 Supporting Existing Local Economic Activity

Economic renewal based on existing local enterprises proved to be an effective strategy for the Valleys. Small loans and grants to local industry for capital, for retraining labour and taking on the long-term unemployed have had a markedly beneficial impact and have delivered significant added value by maintaining local networks of social cohesion.

6.1.3 Diversifying the Economic Base

Diversifying the economic base of mining communities has proved difficult, as new small and medium-sized enterprises are seldom in themselves strong drivers of local economic recovery. Large manufacturing industries relocating into mining areas can have a major impact if matched with retraining the local workforce. Diversification requires a clear plan and progress at all levels.

6.1.4 Attracting Inward Investment

Attracting inward investment requires the provision of financial and material inducements to secure businesses from another part of the region or further afield. The difficulty is that designated areas may be competing for consideration by companies planning to relocate. In addition, the relocation of industry and commerce to a designated area may simply deprive another area of employment. In South Wales, the Welsh Development Agency (WDA) successfully concentrated its efforts on both drawing in investment from elsewhere in Britain and, importantly, securing inward investment from abroad with significant subsidies for capital, labour and buildings.

6.1.5 Developing Local Supply Chains

A key lesson from initiatives in South Wales is that economic transformation is most rapid and robust when all levels of the local economy are involved in and benefit from renewal. Connecting local supply chains through local procurement policies (Industrial Communities Alliance, 2014) and procedures to support manufacturing enterprises and start-ups strengthens the local economy and supports the local circulation of wealth.
6.1.6 Encouraging Entrepreneurship
A former Welsh government First Minister, Rhodri Morgan (Personal interview, November 2016), recounts that a group of students were provided free workshop space in a decommissioned colliery building from which they established a new electronics company (SPTS Technologies Ltd.) that now employs several hundred workers. He points out that new start-up companies are an essential component for economic transformation. The WDA pioneered the encouragement of entrepreneurs and has continued to do so.

6.1.7 Delivering Skills Training
The mining and ancillary skills of miners are invariably manual, and those involved in manual labour are often poorly equipped to move into intellectual and precision industries. The need to retrain the workforce to meet labour market requirements of a restructured economy were understood and addressed by the British government in the 1930s. Numerous government and EU-funded programs have pursued this policy, which has been most successful when designed to account for the skills and potential of the individual worker and are linked to training and employment opportunities. The EU-funded Job Match Programme was an excellent example of a well-run and effective initiative.

6.1.8 Improving Educational Standards
Establishing and sustaining a long-term economic base in former mining communities requires increasing educational and intellectual attainment levels. Investment in higher education is required to establish a workforce that can take advantage of employment opportunities, particularly those in new technology and innovation. Linking higher education institutions together and directly with the business community to their mutual benefit has proved invaluable in South Wales to sharing expertise and knowledge (WDA, 2001) and generating employment.

6.1.9 Adopting New Technology and Innovation
In South Wales the adoption of new technology and innovation required significant effort to shake off the legacy and attitudes of coal mining and to redirect the mindset of local institutions, communities and individuals toward new industrial practices. Education and the arrival of new training and employment opportunities played a major part in gradually moving new technology and innovation forward.

6.2 Improving the Physical Infrastructure and Environment
6.2.1 Constructing New Infrastructure and Roads
Investment in infrastructure lays the foundations for future economic growth. It is essential to attract new business, but this requires integrated planning and very significant resources. In South Wales substantial funds were successfully directed toward improving roads and telecommunications networks.

6.2.2 Undertaking Colliery Restitution and Environmental Improvements
The WDA invested many millions of pounds removing industrial dereliction and decay, landscaping slag heaps and scarred mountain slopes, returning biodiversity and improving town centres. Demolishing old collieries and bringing the land back into safe economic use and into a safe condition for recreational use not only delivers a rejuvenated environment—it constitutes an expression of confidence in the future. South Wales has excelled at this task.
6.2.3 Improving the Housing Stock

Good-quality housing has always been one of the most important factors in the lives of miners and their families. Early housing in the Valleys was soon replaced with sound terraced houses that, although initially very basic, were easily improved and maintained. Later, public housing, in most cases built to high standards, added significantly to the housing stock and it is the availability of housing in the Valleys that has contributed to maintaining population levels in the face of outward migration pressures.

6.3 Strengthening Community Cohesion and Support for Economic Transformation

6.3.1 Providing Welfare Benefits

In Britain and certainly in South Wales nothing compares to the value and importance of state welfare benefits in sustaining the living standards and community cohesion of those residing in former coalfields. Changes in welfare benefits introduced by national government are a permanent preoccupation of the British body politic. The provision of a wide variety of individual and family welfare benefits is a matter of immediate and daily concern for many due to the continuing lack of employment opportunities and their necessary reliance on state support.

6.3.2 Understanding the Community

A robust social and economic analysis of the mining communities needs to be in place and regularly updated to facilitate the formulation and improvement of strategic plans and their monitoring and evaluation. Numerous research documents and reports exist on the challenges faced in South Wales—these are available together with feasibility studies and strategic proposals; however, the translation of these into effective policies with measurable outcomes has been modest.

6.3.3 Reinforcing Community Identity and Culture

Inhabitants of the Valleys possessed and continue to possess distinct characteristics that they regard as their collective identity. This identity reflects the depth and resilience of community networks and can be engaged to great effect in support of economic and social transformation. History and heritage, culture and the arts, are all invaluable components of mining communities and worthy of support in order to maintain social cohesion, increase participation (Kumar, Americo, & Billingham, 2016), and engender enthusiasm and support for renewal. In South Wales it is well understood at all levels that coherent strategies have proved difficult to orchestrate and deliver.

6.3.4 Acknowledging That Communities Are not Responsible for Economic Decline

Former miners and their families are not responsible for the economic position in which they now find themselves, and local effort alone is insufficient to overcome the macroeconomic problems resulting from the closure of collieries. This is understood and acknowledged in South Wales, but local political imperatives still demand local remedial programs that can incorporate unrealistic macroeconomic and social objectives.

6.4 Delivering Policies and Practices

6.4.1 Adopting Long-Term Strategies Supported by Adequate Resources

The fortunes of the coal industry in South Wales have fluctuated over a long period of time. Government policy changed regularly over relatively short timescales in response to new political circumstances and variations in the world market. The radicalism of trade mining unions helped
conceal the declining economic sustainability of coal mining in the Valleys. After 1990, government focus remained on transforming the economic base of the Valleys but its policies and programs were irregular, short-term, often inadequately resourced and frequently revised or abandoned well ahead of meeting their planned objectives. Although this lesson has been learned in South Wales, it remains a challenge to initiate joint action when public funds are shrinking.

6.4.2 Insisting on a Robust Connectivity Between Policy and Implementation

The experience of South Wales reveals a frequent disconnect between national politicians deciding on overall policy objectives, regional politicians carrying the policies forward, those responsible for implementing strategies and programs, and members of the community affected by activity on the ground. This separation heightens the hurdles that continue to be encountered in South Wales in delivering effective and efficient solutions.

6.4.3 Establishing a Dedicated Delivery Mechanism

Notwithstanding the process of political devolution that occurred in Wales there is strong evidence to support the view that the Welsh Development Agency (WDA) provided an excellent example of a lead body charged with delivering the many facets of economic renewal. It was obliged to work in partnership with all levels of government and other institutions, but possessed the knowledge, skills and commercial flair to orchestrate funding, co-ordinate efforts and drive initiatives forward. Today, the landscape of renewal and economic development funding and responsibility has reverted to a wide diversity of government and non-government agencies and initiatives with different policies, priorities and budgets (Department for Communities and Local Government, 2007). Whereas this partnership work is a strength, it does not replicate the focus and achievements of the WDA.

6.4.4 Ensuring the Capacity of Civil Servants to Deliver

Civil servants responsible for advising and overseeing the implementation of any strategic economic plans must be sufficiently experienced and accomplished in economic development, business practice and community engagement. Due to reduced budgets and the shrinking of the Welsh government, the renewal skills of civil servants have diminished, which continues to present a significant challenge to sound policy development and program implementation.
7.0 Conclusion

The gradual decline and eventual end of coal mining in South Wales is characterized by location-specific economic and political factors. The role of the trade unions (and the political attitude to these unions), the geological and geographical conditions, and the changing energy profile of the United Kingdom are factors that combined in a narrative that will remain unique to that particular coalfield. Nevertheless, there are many factors in common with other coalfields, and many policy lessons that can be drawn from the Welsh experience and usefully applied elsewhere.

In terms of commonalities, the South Wales mining communities were built around and largely dependent upon mining for economic and social prosperity. Compounding this dependence, the communities were typically relatively isolated, with limited or difficult access to centres of population that could have been a source of alternative employment. Given these two factors, the communities were extremely vulnerable to changes in economic, political and environmental realities. As coal production became increasingly uneconomic, and as political opposition to subsidies heightened, the industry and those who were dependent upon it were increasingly exposed. Many of these factors characterize coalfields across the world, and the decline of coal mining in South Wales is a useful example for policy-makers in these other communities.

In general terms, South Wales illustrates the vital importance of resilience in securing a smooth economic and social transition. Resilience is fostered, at least in part, by economic diversification and by ensuring education and skill levels among the local population are such that the community can adapt to changing economic and political environments. Other important factors include physical capital such as roads (which enable individuals to travel to other jobs and businesses to set up in a wider range of locations thus bring jobs to communities) and facilities for businesses such as office, factory and warehouse space. Here, the record of policy-makers is mixed. Undoubtedly, they recognized acquisition of skills and knowledge as important, but even today educational attainment levels trail those in the rest of the country. While South Wales secured inward investment from manufacturing companies, its record with respect to more advanced industries—which require higher levels of skills and knowledge—is more questionable. For policy-makers elsewhere, attention to skills among not only miners, but the community more broadly is an obvious lesson to be learned from the Welsh case.

This case study has examined the importance of inward investment in supporting the economic transition in Wales, and in particular the role of the Welsh Development Agency (WDA). It concludes that the inward investment secured by the agency had a significant impact in generating jobs in the post-mining period, and in broadening participation in the workforce. On a macroeconomic level, and in the short and medium terms, available evidence suggests that WDA was an extremely successful intervention. However, at the level of individual mining communities, the success of the WDA was more muted: the majority of investment was located on the coastal strip rather than in mining communities of the Valleys, and although opportunities were opened up for women and younger men, the jobs created through WDA investment were not necessarily suited to former miners. Similarly, inward investment by the EU, although significant, was not necessarily directed at projects and interventions that would have been the most beneficial to miners. While policy-makers could conclude that inward investment can be a valuable strategy—particularly when agencies are working with a clear mandate and sufficient resources—they can also conclude that the precise design of this strategy is crucially important.
Over the longer term, the effects of the WDA are less clear-cut. Once the incentives for incoming investors dried up and competition from other low cost destinations increased, the rate of investment dropped and companies withdrew. Once again, the resilience of the economy to deal with changing economic structures—this time the shift to knowledge-based industries—was proven to be somewhat lacking. Again, for policy-makers elsewhere, this suggests that inward investment strategies need to be complemented by long-term policies aimed at educational attainment and skills development, and that they need to be tightly defined with respect to economic and social objectives.

Given the economic and social dislocation that characterized the decline of mining in South Wales, social safety networks were crucial in alleviating poverty in the short term. The presence of social welfare payments allowed former miners and their families to cover household expenses and bought time during which a transition to a post-coal economy could be organized. However, continued reliance on these social safety nets two decades after the end of mining points to the need to reassess policies aimed at addressing economic transition in South Wales. Government support—through welfare payments and inward investment schemes to bring jobs to the region—provided a short- and medium-term response to a sudden loss of employment; however, in the case of South Wales this support has not proven sufficient to create a resilient and diverse economy in the longer term.
References


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The End of Coal Mining in South Wales: Lessons learned from industrial transformation


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Appendix

List of Case Study Interviewees

John Asquith  Former Mid Glamorgan Council government advisor and historian
Gareth Beer  Senior Economic Advisor. Welsh Development Agency
Dr. Ben Curtis  Lecturer in Modern Welsh History. Cardiff University
Patrick Lewis  Chief Executive, Heads of the Valleys Programme
Prof. Brian Morgan  Professor of Entrepreneurship. Cardiff Metropolitan University
Rhodri Morgan  Welsh Government First Minister (2000–2009)
Derek Vaughan  Member of the European Parliament for Wales