

Course EH390

BSc Economic History

London School of Economics

**The Economic Effects of Immigration:
Bedford, UK 1951 - 2001**

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1. Introduction

This is an investigation into the economic effects of immigration upon an East Anglian market town in the second half of the twentieth century, incorporating a summary of the relevant literature on the subject. The focus is on changes in the occupational and industrial structure of the town in the context of local, regional and national patterns of employment. I discuss the history of migration to Bedford in the context of economic migration to the United Kingdom, proceeding to an analysis of the relevant theories that provide a structure for data interpretation of the question as to why Bedford's economy may have developed differently from that of the rest of the country. I expound my hypothesis concerning the possible benefits of immigration for Bedford's manufacturing sector, and my method, in which predictions of individual indicators are made for proving my hypothesis. In the fifth chapter my findings are illustrated in textual and graphical form, and in the sixth chapter these results are analysed closely. Finally, the deeper significance of my analysis in its wider context is explained in the conclusion.



Figure 1 picture source: Bedford Development Agency

During a five minute walk from the main railway station on Ashburnham Road to the centrally located bus station in Bedford the cosmopolitan nature of the town is manifest. Next to the railway station is a *Dom Polski*. Taking the route down Woburn Road one sees an Italian Roman Catholic church, vibrant with weddings at weekends. Turning right onto Alexandra Road, one passes first a West Indian cultural centre, then the Afro-Caribbean Miracle Church of God, and on the left another Club *Polski*. On Alexandra Place one sees an Italian Club and the Bangladeshi Mosque. In front of the Bus Station is Priory Lower School, where young children of all ethnic backgrounds play and fight in the playground. Taking the alternative route from Ashburnham Road is the very busy Midland Road, colourful with ethnic businesses and fashion shops. Here one finds The West Indian Mount Zion Church, Italian, Turkish, Chinese, Indian, halal

restaurants and takeaways, Italian and Afro-Caribbean hairdressers, Indian shops and supermarkets. Over the railway bridge from Midland Road is the Queens Park district dominated by ethnic minorities, teeming with jewellery and fashion businesses, travel agents, money exchangers and halal groceries. The majority of properties are owned by Asians or rented to first generation Asian and Eastern European immigrants by housing associations.

1.1. Historical Background: Causes of Immigration

Large scale immigration to Bedford began during the Second World War, when some 3000 German prisoners of war were used as labour in the Stewartby brickworks just south-west of Bedford, substituting for the manual workers who had joined the army.¹ The discovery of the unique properties of the region's Lower Oxford Clay, in particular the 10% carbon content that allowed its 'fletton' bricks to burn fully, reducing fuel consumption by two-thirds, had transformed brick-making in the 1880s from a seasonal local process to a mechanised mass production industry, supplying bricks nationally². Stewartby became the headquarters of the country's largest brick manufacturer, London Brick Company Ltd, and was foremost among the large engineering and food-processing factories that participated in 'pulling' waves of immigrants to Bedford during the second half of the 20th century.³

Migration is either forced or voluntary. When voluntary, it is driven by 'push' and 'pull' factors.⁴ Voluntary migration occurs when people decide that moving is preferable to staying, when the difficulties of moving appear to be compensated by the expected rewards. Each of the different immigrant groups to Bedford experienced different push factors, the most common being economic and political. Push factors are usually the impetus for a move resulting from dissatisfaction with the current location. People are 'pushed' from areas of relatively low wages and/or high unemployment and/or political instability, and 'pulled' to areas of relatively high wages and/or low unemployment levels and/or relative political stability. Pull factors can lead to what is known as a 'brain drain' as professionals from low-paying areas migrate to high wage areas, whilst non-professionals given short-term jobs are termed 'guest workers'.

By 1947 London Brick's chairman was urging the Government to release the industry from restrictions on the supply of labour and materials, urgently seeking to restore its full complement of 8000 men for the post-war building programme.⁵ In the reconstruction and expansion of British industry after World War Two, Britain's manufacturing sector was experiencing a severe labour shortage, aggravated by the gradual repatriation of POWs and the war loss of a large section of the native male population. London Brick commanded 70% of the market for bricks and thus held much influence in the industry's sponsoring ministry, the

¹ Immigration to Bedford is described by Brown (1970) in Brown, J. *The Un-Melting Pot*, (Macmillan and Co, 1970) Brown gives a useful account of the situation of different immigrants which have come to Bedford from the 1940s to the 1960s. Of particular interest is his chapter on employment, describing the kind of work immigrants were able to find and the problems they faced.

² Hillier, R. *The Clay that Burns* (London 1981)

³ The London Brick Company was acquired by Hanson, the international building materials conglomerate, in 1984. Stewartby is now the head office of the UK brick and concrete divisions that form Hanson Building Products.

⁴ Jordan-Bychkov, T.G. and Domosh, M. *The Human Mosaic* (New York, 1999)

⁵ Hillier (1981) pp. 74-81

Ministry of Works. Many former servicemen did not return to manual labour in the brickyards, commonly regarded as hard and dirty work, choosing instead to utilise new skills learnt in the army in other occupations or industries. Similarly throughout the 1950s many young men were unwilling to work as manual labourers in heavy industry after learning new skills during their period of National Service.⁶

Accordingly, the Ministry of Works and the Ministry of Labour supported various overseas bulk recruitment programmes for areas and sectors with labour shortages. The European Voluntary Workers Programme attracted an influx of displaced persons to Bedford from Central and Eastern Europe, in particular Poland, the Ukraine, Yugoslavia and Latvia, fleeing the consequences of war, poverty and the expansion of the Soviet Union.⁷ Many of these refugees were skilled workers, academics and professionals who left manual employment after completing the three-year requirement. Having become competent in English during this time they were then free to establish themselves elsewhere in Britain in the occupations for which they were originally qualified to fill, as was also the case for subsequent flows of political refugees who worked for limited periods in the brickworks, such as the Vietnamese and Cambodian 'Boat People' of the mid-1970s.⁸

From 1949 to 1960 demand for fletton bricks continued to outstrip the industry's ability to supply. Attempts to recruit British labour from areas of high unemployment failed spectacularly.⁹ In 1951 the personnel managers of Bedfordshire's leading brickyards made what subsequently became an annual pilgrimage to Southern Italy to recruit Italian 'guest workers'. Unemployment was very high in the *Mezzogiorno*, with standards of living far lower than in the prosperous north, and London Brick was encouraged by reports of Italian prisoners of war being diligent workers.¹⁰ The Marston Valley Brick Company even established a recruitment centre in Naples.¹¹ By the end of that year, half of the employees of local brickyards were immigrant workers, so that 'the town's ethnic minorities arrived essentially as a replacement labour force'.¹² This venture proved very successful, and so with the co-operation of both UK and Italian governments over 7,500 Italians were recruited by the mid-1960s. Over 60% of the first arrivals – mainly young, single men – returned to their native land on completion of their four-year contracts, having earned enough to provide for a future of greater opportunity. Nevertheless by

⁶ In the opinion of D. Haigh (1971), the Managing Director of London Brick at the time, in an account of the difficulties which London Brick encountered in its efforts to obtain and maintain an adequate supply of labour after the Second World War. Held in Peterborough Central Library.

⁷ Brown (1970)

⁸ Mick Daniels, industrial relations manager of Hanson Building Products, and responsible for the historical data on the London Brick Company at the Stewartby site. Interview 23.04.2004.

⁹ Haigh (1971) describes the recruitment drives in regions where unemployment had risen above the 2% national average, primarily concentrated in the shipbuilding areas of Tyneside, Clydeside, and Merseyside. Even with the provision of transport and small government resettlement grants, only 2-3% of those who accepted employment were still at work after one month. Many men did not even leave the trains they had boarded. Others returned home after one night in a company hostel.

¹⁰ Haigh (1971)

¹¹ Semeraro, C. on website: Legacies UK histories: Immigration and Emigration, Bedford's Italian Question http://www.bbc.co.uk/legacies/immig_emig/england/beds_herts_bucks/article_1.shtml
The Marston Valley Brick Company was acquired by London Brick Company in 1971.

¹² Sarre, P., Philips, D. and Skellington, R., *Ethnic minority housing, explanations and policies*, (1989) p. 60

the late 1950s and 60s, families of workers joining their menfolk maintained a steady flow of Italians to Bedford. By 1958 around 85% of new arrivals were married women joining their husbands.¹³ In the 1960s and 70s London Brick's varied recruitment drive was evinced in large numbers of 'New Commonwealth' (NC) workers filling the workforce and replacing previous immigrant waves – West Indians, Indians, Pakistanis and Bangladeshis.¹⁴ In the case of the NC workers, Britain was regarded as 'the mother country, the heart of the Empire'¹⁵, which provided potent socio-cultural pull factors in the legacy of colonial socialisation.

E.G. Ravenstein described the relationship between migration and distance in 1885 as an inverse relationship in which migration decreased as distance increased.¹⁶ However, the pre-existing social and familial networks, particularly in the case of the Indians and Pakistanis, also served as a powerful pull factor, leading to 'chain migration'.¹⁷ By the early 1960s London Brick's overseas recruitment publicity was abandoned as unnecessary, so plentiful were the applications for manual work from friends and relatives of current Indian and Pakistani employees.¹⁸ With the 'Commonwealth Immigration Act' of 1962, the Conservative Government introduced a voucher system intended to restructure and contain immigration based on the nation's economic requirements.¹⁹ Applicants with job offers and with scarce skills were differentiated from and prioritised over others, although dependents of those already in the UK were allowed to come without vouchers: between 1962 and 1968, 140,000 entered the country as workers and 510,000 as dependents.²⁰

2. Economic Theory

2.1. Olson's Sclerosis

According to public choice economist Olson (1982), under conditions of peace and stability a society will eventually be controlled by special interest groups which aim to increase their share of economic output, even though this entails a reduction in the welfare of society.²¹ The classic example of this 'rent-seeking' activity is the privileged monopoly status granted to individual companies by government. This allows the monopoly to make a profit, but at a higher cost to the

¹³ Carmela Semeraro http://www.bbc.co.uk/legacies/immig_emig/england/beds_herts_bucks/article_1.shtml

¹⁴ New Commonwealth designates primarily Bangladeshi, Chinese (Hong Kong and Singapore), Indian, African, West Indian and Pakistani immigrants. Although Pakistan left the Commonwealth in 1972, it is included in the statistics for ease of measurement.

¹⁵ Sarre et al. (1989) p. 60. Sarre et al. is a detailed analysis of the housing and wellbeing of ethnic minorities in Bedford and the growth of the town. It extensively quotes Brown (1970) and explains ideologies surrounding race relations. Of particular interest is Chapter 3, "The evolution of ethnic minority settlement".

This third wave of New Commonwealth immigrants played a crucial role in preventing the depopulation of the Queen's Park district of Bedford. Built during the early 20th century to accommodate the 3500 employees of WH Allen's engineering works, Queen's Park would otherwise have been depopulated by unemployment, accompanying the company's declining scale of operations and workforce size, ending in factory closure in 1999.

¹⁶ Ravenstein, E.G., 'The Laws of Migration', *Journal of the Statistical Society of London*, Vol. 48, No.2. (June 1885), pp. 167-235

¹⁷ Anwar, M. 'New Commonwealth Migration to the UK' in Cohen, R. (ed.) *The Cambridge Survey of World Migration* pp.274-278

¹⁸ Daniels, M. Interview

¹⁹ Baines, D., *Immigration Policy in a Country of Emigration, Britain in the Twentieth Century*, LSE, 2004; p.9

²⁰ In 1951, there were 74,000 people of NC origin in the UK as a whole, increasing to 336,000 in 1961 and 2.2 million in 1981. Anwar p.275

²¹ Olson, M. *The Rise and Decline of Nations* (Yale, 1982)

consumer and with lower levels of output. Olson believed democracies were vulnerable to this condition of 'sclerosis', whereby growth is reduced or inhibited by the complete socio-economic domination of special interest groups and monopolies, which redirect economic resources away from growth and towards their own consumption.

Ceteris paribus, an increase in population through natural growth is likely to increase the power of special interests, since governance of a community becomes more difficult and impersonal. As social bonds weaken, the ability of a small tightly knit group of individuals to influence government policy may increase. Furthermore, as small group of like minded individuals are more likely to be able to put together a coherent plan to influence the authorities than a large group, due to the "free rider" problem²². Olson argues that external shocks to an economy can shake up the system, and break the stranglehold of rent-seekers. In the aftermath of war with the economic, political and socio-cultural restructuring of Europe, the influx of immigrants to Bedford may be expected to disrupt the power of vested interests to stifle entrepreneurship and economic exchange, and to undermine trade union influence. By setting up their own businesses, breaking the pattern of monopolies and cartels that previously dominated the community's economy and increasing labour supply, greater industrial expansion should follow.

2.2. "The work that we don't want to do"

It is common in the literature on migration to talk about immigrants from poor countries coming to do the work white natives do not want to perform²³. From an economics perspective, such a phrase is an anathema. It is a fundamental assumption that individuals are only willing to sell their labour in return for compensation, so obliging employers to pay their labour supply wages.²⁴

So what is actually happening when companies such as the brick yard recruit overseas? They are recruiting employees willing to perform the same work as native Britons, at a lower wage, and possibly for longer hours, under worse conditions, and with greater (self-) discipline than indigenous Bedfordians. To the host industries, these ethnic groups constituted a relatively cheap manual labour supply in comparison with the wage rates that would have had to be paid to a workforce consisting solely of ethnic Englishmen.

The strategic importance of the brick manufacturing industry to the nation's growth permitted the brick companies with the largest market share to recruit overseas labour. Houses had been destroyed by war, and the population was growing quickly with the new 'baby boom' signifying increasing demand for new homes. In a scenario of excess demand for good housing, economic theory demonstrates that the population should pay its brick-workers higher wages, thus attracting more brick workers and facilitating more bricks for more houses at a higher price. In

²² In large groups, individuals will have less incentive to take the initiative if they expect to benefit from the positive spill-over effects of, for example, other individuals lobbying the government for them.

²³ For example: Brown (1970) p.146

²⁴ Work is by definition something people do not want to do, being 'action involving effort and exertion...as a means of gaining one's livelihood; toil.' OED definition from <http://athens.oed.com>

this way supply rises and demand falls, and equilibrium is reached. Those who are too fastidious to take up a job in the highly paying brick industry will be sacrificing income, and those unable to afford a house of their own may rent accommodation, reducing the total demand for housing and therefore the cost for others. With excess demand for labour, wages rise, and the economy switches in the long term to more capital intensive methods of production.

This must have been regarded as a sub-optimal arrangement by the decision-makers in Britain. Native Britons would have been likely to set up a strong trade union and assert their civil rights.²⁵ Perhaps a factor influencing the authorities' policy decisions was the desire to contain the creation of a 'hotbed of socialism' in the flourishing heavy industrial sector. By allowing London Brick Company to import labour, the government may have intended the work to be performed by more docile and obedient workers at lower wages, simultaneously enabling all competing employers of manual labourers in the same areas to maintain similarly low wage rates.²⁶ This may not have succeeded; according to Hanson's Mick Daniels, the Stewartby brickworks functioned as a closed shop ("100% unionised") until such arrangements were made illegal by Thatcherite reforms of the 1980s, and even today Daniels estimates that the workforce is "98% unionised". Daniels maintains that wages for foreign workers were never kept lower than the local average - there was always considerable competition for manual labour supply in the area from other large employers. Nevertheless, this does not negate the function of a sufficient external labour supply in keeping wages at steady, uniformly low rates for the whole area through avoidance of inflationary pressure on wages.

2.3. The 'Lewis Model' of the Dual Sector Economy

Lewis (1954) shows that where there is a sector of the economy with a low marginal productivity of labour and one with a high marginal productivity of labour, by which rural agriculture and urban industry are signified, wages in industry will be a fraction above those in agriculture to attract the desired level of migration.²⁷ This will result in the marginal productivity of labour in urban industry exceeding the level of wages in the urban sector, the difference between the two constituting supernormal profits, which accrue to the capitalist-entrepreneur. These he will reinvest, expanding employment in industry, winning further profits and attracting more immigrants until the supply of surplus labour is exhausted, and the marginal productivity of labour in the rural agricultural sector equals that of the urban industrial sector. Wages in both sectors will find equilibrium at the level of marginal productivity, profits will fall to their normal level (zero above costs), and the incentive to reinvest will cease to exist. In the absence of

²⁵ Unaware of their rights, many Italians were exploited by unscrupulous landlords. Up to 50 people could be crammed into houses designed for two families. Some landlords even let the same bed to more than one person, taking advantage of the brick-workers' shift patterns. In 1956 the Rent Acts were amended in Parliament to protect the Italian workers. Semeraro, C.
http://www.bbc.co.uk/legacies/immig_emig/england/beds_herts_bucks/article_2.shtml

²⁶ This idea that immigration undermines socialist institutional arrangements and consequently social cohesion is being popularised today. An example of this thought is Goodhart, D. 'Is Britain becoming too diverse to sustain the mutual obligations behind a good society and the welfare state?' *Prospect*, February 2004

²⁷ Lewis, WA 'Economic Development with Unlimited Supplies of Labour', *Manchester School* 22 (May 1954), pp.139-91.

technological progress, the urban industrial sector will cease to grow.

Viewing Bedford in this light, we can regard the countries from which London Brick Company was recruiting as the 'rural agricultural sector', and Bedfordshire's manufacturing sector as the 'urban industrial sector'. Whilst immigration to Bedford may have been somewhat small to raise the level of wages in regions such as Eastern Europe, Southern Italy, the West Indies and South East Asia, the principle remains the same – in the process of migration to Bedford, wages in the destination locality should be lower than the marginal productivity of labour, and the town's manufacturing sector should grow. When the supply of immigrant labour is cut off, either due to rising wages in the donor country (as was the case in Southern Italy) or due to government legislation responding to the unpopularity of inward migration during periods of high domestic unemployment, wages should rise to equal the marginal productivity of labour, and Bedford's manufacturing sector should cease to grow.

3. Hypotheses

3.1. Facilitation of the growth of industry

According to neo-classical growth theories, there exist diminishing returns to capital and labour. In markets that allow the free movement of capital, which is the case within the UK, capital should flow from areas with high ratios of capital to labour, to areas with low ratios of capital to labour. This should mean that an influx of immigration as labour for the manufacturing industry, whether from abroad or from other parts of the UK, should lower the ratio of capital to labour, raising the marginal productivity of capital, and therefore causing investment in manufacturing to increase.

Furthermore, immigrants from various countries were seen as having qualities which made them more attractive to employers than native workers. Brown describes how Bedford's large employers of female labour, such as Tobler-Meltis and Texas Instruments, found that 'Asian girls, in particular, are willing and co-operative in their work attitudes' whilst 'English girls present more problems than any other ethnic group'.²⁸ If immigrants are, for various socio-cultural reasons, more productive workers than the natives, manufacturers in Bedford would have an advantage over those in the rest of the country, enabling significant growth of manufacturing in the town, and higher wages and/or profits.

I hypothesise that immigration provided a supply of surplus labour to the town of Bedford, facilitating greater industrial growth than would otherwise have been the case. Therefore Bedford's manufacturing sector should evince faster/greater expansion from 1951-2001 than the national average.

3.2. Cushioning the decline of industry

Cheap labour should delay the decline of traditional manufacturing. Immigrants, prepared to work for long hours under poor conditions, are 'pulled in' by the brick industry. According to

²⁸ Brown (1970) p.152

this theory, immigrants to Bedford should be more likely to work in manufacturing than native Britons. The competitive advantage they provide for their employers in the manufacturing sector should delay the transition to more capital intensive production techniques and the need for industrial restructuring.

3.3. Adaption to a service-based economy

Entrepreneurial ethnic minorities, whether first generation immigrants or otherwise, should expedite the growth of the service sector. The Borough Council study, *Ethnic Minority Business* (1992), shows businesses owned by ethnic minorities in Bedford and Luton to be concentrated in the retail and wholesale (47% of businesses) and catering (23%) sectors of the economy at the start of the decade. The majority of these businesses were very small – only 2% had more than 10 employees.

Ethnic minorities frequently play a strong role in the economic development of many countries. The Ethnic Minority Business Study claims that ethnic minorities are more likely to set up their own businesses than the white majority. The Inner Bedford Labour Market Study of 1991 explains that 'Asian and Italian men are slightly more likely than others to be self employed'.²⁹ Racial and cultural discrimination and hostility on the part of dominant social groupings often signify problematic entry for the newcomers into previously existing industrial concerns. When isolated from mainstream society, minority groups form stronger social bonds, lowering the transaction and information costs between individuals in the community (Brown 1970). This improves access to informal capital within the groups, and provides their businesses with a comparative advantage over those of the rest of society. It is thus to be predicted that both immigrants and ethnic minorities are overrepresented in service sector employment, especially in small, dynamic enterprises which they themselves set up. A higher than average rate of self-employment in the service sector should act as a countervailing force on unemployment and expedite the growth of a service sector in Bedford.

3.4. Unemployment

The friction between different cultures interacting may raise the transaction costs for a firm specifically associated with hiring employees from a different country and cultures. Thus the minority groups may be more introverted and likely to attempt to reduce the possibly high costs of interaction in an 'alien' culture and instead set up their own businesses.

The presence of such social rigidities may mean Bedford has higher unemployment than other towns. Nevertheless strong entrepreneurship among ethnic minorities may serve to offset the rigidities, implying that ethnic minorities should display lower unemployment levels than the indigenous populations.

The manager of Bedford Employment Exchange stated in 1969 that 596 men and 84 women

²⁹ County Planning Officer and Chief Education Officer, *Inner Bedford Labour Market Survey*, Bedfordshire County Council, 1991, p.5

were unemployed, of which 35 men and 6 women were immigrants.³⁰ At a time when immigrants made up 20% of the total population, this represents 6% of the total unemployed. One significant factor contributing to this level of full employment is the *European Voluntary Workers* scheme, upon which their residency depended.³¹ However if low unemployment persisted after the programme was abandoned, other factors must be considered, such as the determination of migrants to find work and their willingness to tolerate any conditions, perhaps driven by the necessity to send money home to relatives and the social stigma of unemployment.

4. Method

The task is to compare and contrast national Census data on employment in Bedford with that of Britain as a whole. Data for industrial and occupational structures is available for the Bedford Borough from the 1951 Census, and a study by the Bedford Planning agency provides information on Bedford's employment structure from 1954. The patterns of employment and industrial activity in Bedford, both in the 1950s and at the end of the 20th century, shall be compared with other towns in the country possessing similar industrial structures but a differing ethnic composition. Bedford must also be compared with towns with similar levels of ethnic minority composition with contrasting industrial structures.

The urban settlements chosen as comparative and contrastive reference points have been picked due to their similarities with Bedford in terms of population size and distance from London. They are also valuable in proffering cumulatively a wide range of ethnic compositions ensuing from highly diverse historical migratory movements.

I shall compare changes in occupational and industrial structure in the town between 1951 and 2001 to investigate Prediction 1, whether Bedford's manufacturing sector grew faster than that of the country as a whole, or conversely contracted more slowly or at a later period in time from that of the country as a whole. If growth in manufacturing employment was higher in Bedford during the period of high manufacturing growth than the national average, I will conclude that immigration aided the growth of Bedford's manufacturing sector. During the period of deindustrialisation, generally observed to date from the 1970s, employment in manufacturing is known to have contracted. If the fall in manufacturing employment in Bedford is smaller than that of the country as a whole, then I will conclude that immigration has helped maintain Bedford's manufacturing industry.

If, on the other hand, growth in Bedford's service sector is faster than that of the rest of the country, I shall conclude that immigration has eased the transition of the economy to a base in the service sector. This can be seen as diametrically opposed to the first prediction, although it is possible that the service sector could grow in its share of employment by attracting labour from areas other than manufacturing, such as construction, government administration, and

³⁰ Brown (1970) p.146

³¹ Ibid, p.29

transport and communication, which I will deal with separately. Prediction 2 asserts that if the service sector grows faster and earlier in Bedford than in the rest of the country, it will have been the result of the entrepreneurship of immigrants and/or ethnic minority communities. To confirm this, I will also use data from the 2001 Census on the proportions of ethnic minority communities who are self-employed.

Due to Bedford's status as a commuter town, the general pattern for commuter towns in displaying lower than average unemployment levels may be reflected. I will compare Bedford with other towns that are an equal distance from London but with different levels of immigration, and compare their levels of unemployment in 2001. Furthermore, I will compare Bedford's unemployment with that of Great Britain historically. If Bedford's unemployment rate is lower during the period of industrial decline, I will, in accordance with Prediction 3, conclude that stronger entrepreneurship has facilitated the town's structural transition.

Unemployment data is only available for different ethnic minorities in the 1991 and 2001 Censuses. Unemployment data is not available separately for resident non-nationals. I will compare levels of unemployment for separate ethnic groups with their educational achievements to ascertain the accuracy of Prediction 4 - that unemployment amongst ethnic minorities is lower than among the native population.

Wages in Bedford will be lower than in the rest of the country whilst immigrants settle in the town and create a pool of surplus labour.³² Therefore, assuming that by the 1990s rates of immigration to Bedford have fallen to around the national average, Prediction 5 states that mean income in Bedford will be similar to the national average for the UK. Data from the Inland Revenue shall be utilised to test this assumption. The relevant regional income figures are available from 1992.

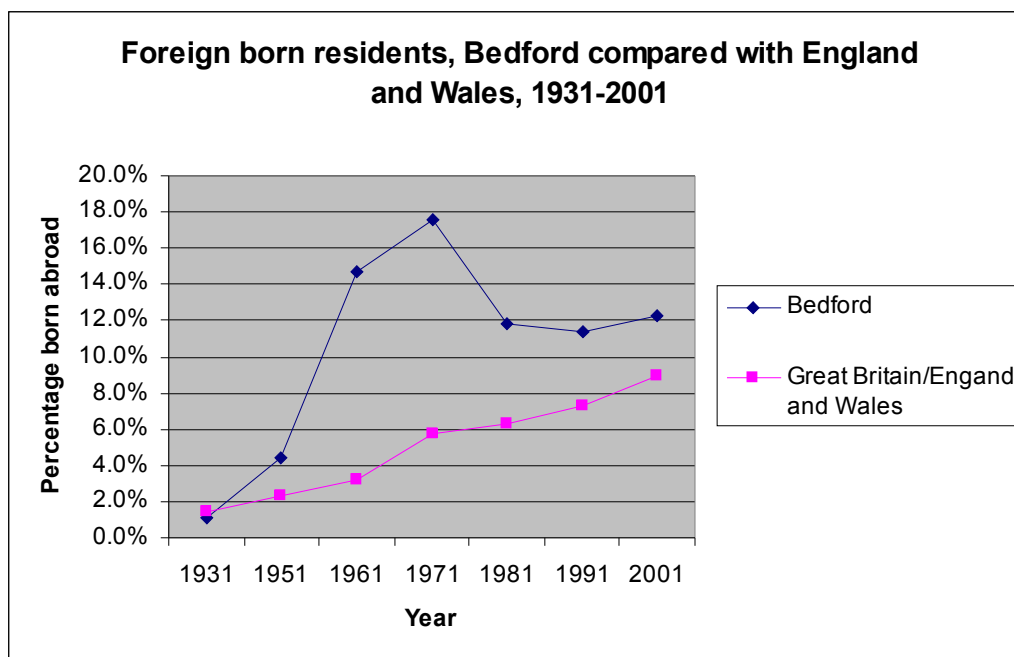
I begin by using population statistics for England and Wales and Bedford, data on persons born outside the UK³³, and the proportion of the population from an ethnic minority background – a categorisation included for the first time in the 1991 Census – to estimate the growth in Bedford's population and the level of immigration the town has received when compared to other towns.

³² Not because immigrants are willing to accept less pay – wages are determined by the operation of the market, not individual preferences.

³³ Of course, not all persons born outside the UK are 'aliens'. There was much return migration of émigrés from the UK. Nonetheless, these statistics are useful for comparing Bedford with England and Wales, and other towns.

5. Results

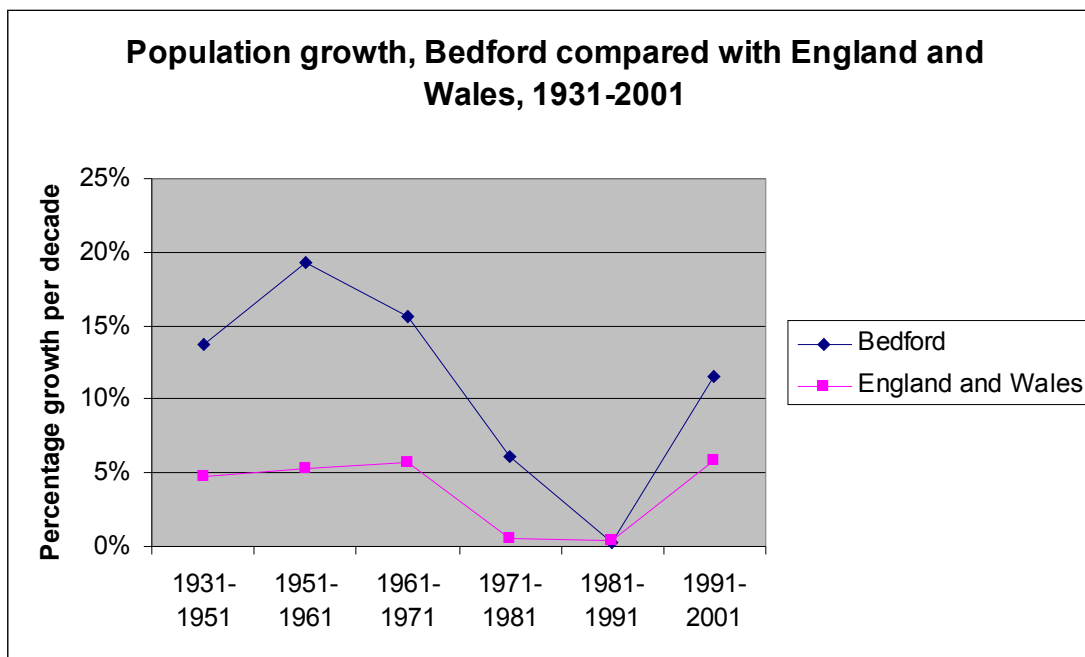
5.1. Measurement of Population and Immigration



Graph A

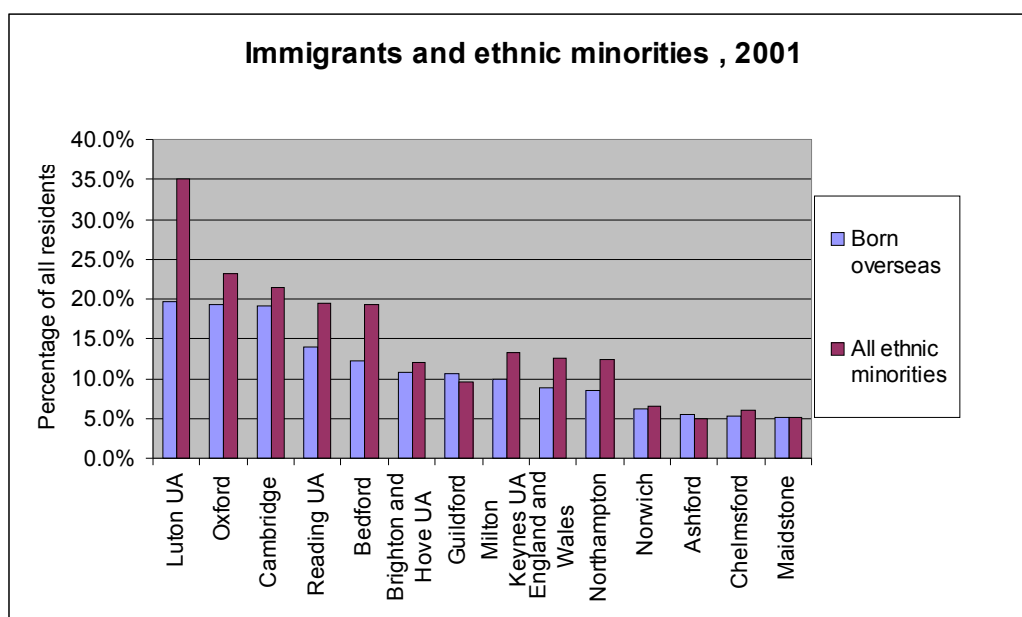
Graph A³⁴ shows the percentage of foreign-born residents in the UK compared with Bedford. The sudden fall of Bedford’s population born overseas between 1971 and 1981 is the result of a change in official boundaries for statistical purposes: Bedford Municipal Borough became North Bedfordshire. The slight fall between 1981 and 1991 must, on the other hand, be due to foreign-born residents leaving North Bedfordshire (or passing away) faster than they were arriving, as there was no increase in the borough’s population during this period (see below). Nonetheless, one can see that the town has a very large number of residents born outside the UK, far more than the UK average. Whilst in 1931 only 1.1% of Bedfordians were born outside the UK, below the national average of 1.4%, in 1971 an impressive 17.5% of those living in Bedford were born abroad, compared with 5.7% for Great Britain.

³⁴ Graph A constructed from National Reports for Great Britain / England and Wales, for censuses from 1951-2001, and for Bedford from Country Leaflets from 1951-1991.



Graph B

As shown by Graph B³⁵, Bedford’s population has also been increasing rapidly in absolute terms. Here one may account for the altered boundaries from Bedford M.B. to North Bedfordshire through the provision of population statistics for North Bedfordshire for 1971 in the 1981 Census. When the population growth rate for the country is subtracted from Bedford’s growth rate, Bedford has a net migration rate of approximately 9% for 1951-61, 14% for 1961-1971, 6% for 1971-81, marginally below 0% for 1981 to 1991, and again 6% for 1991-2001.



Graph C

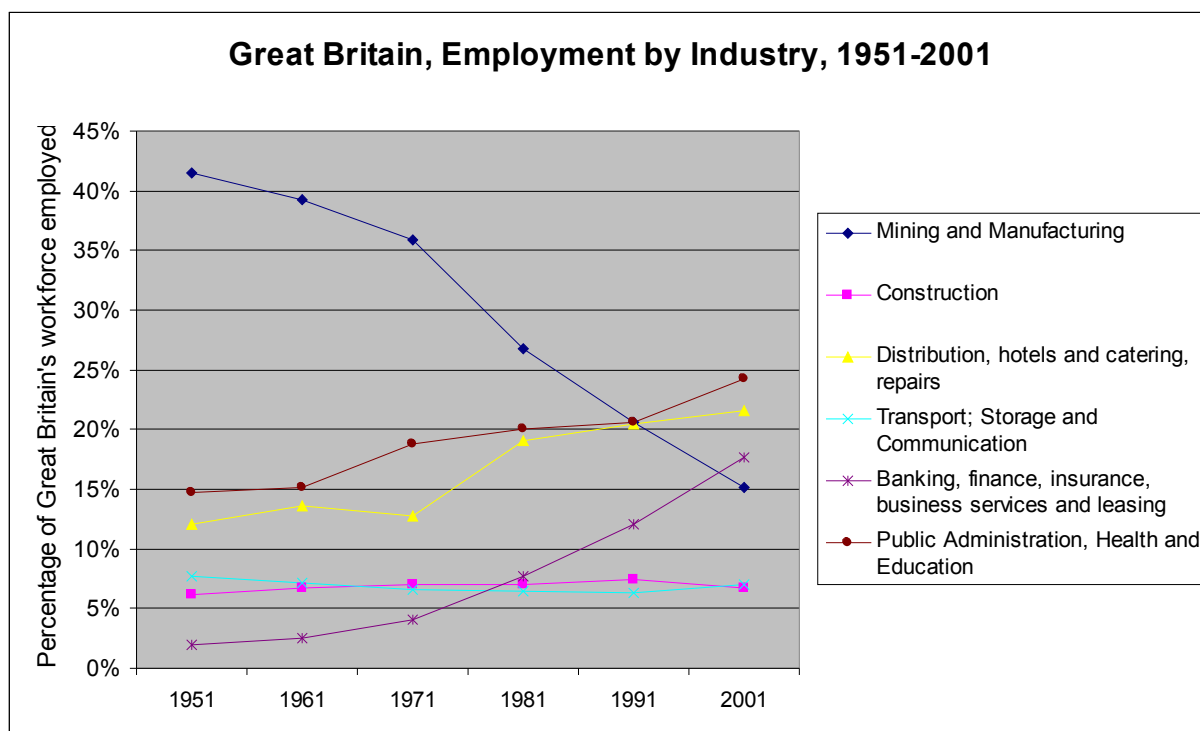
Furthermore, although census information on the country’s ethnic composition is only available

³⁵ Data for Graph B constructed from estimates for past years in 1971 Census for Bedford M.B., From 1981, 1991 and 2001 Censuses for North Bedfordshire and the Bedford Borough.

for the 1991 and 2001 censuses, even within that decade Bedford’s non-white population evinces a substantial increase: from 10.1% to 13% of the total population. The growth rate for ethnic minorities in England and Wales was similarly high, rising from 5.9 to 8.7%.

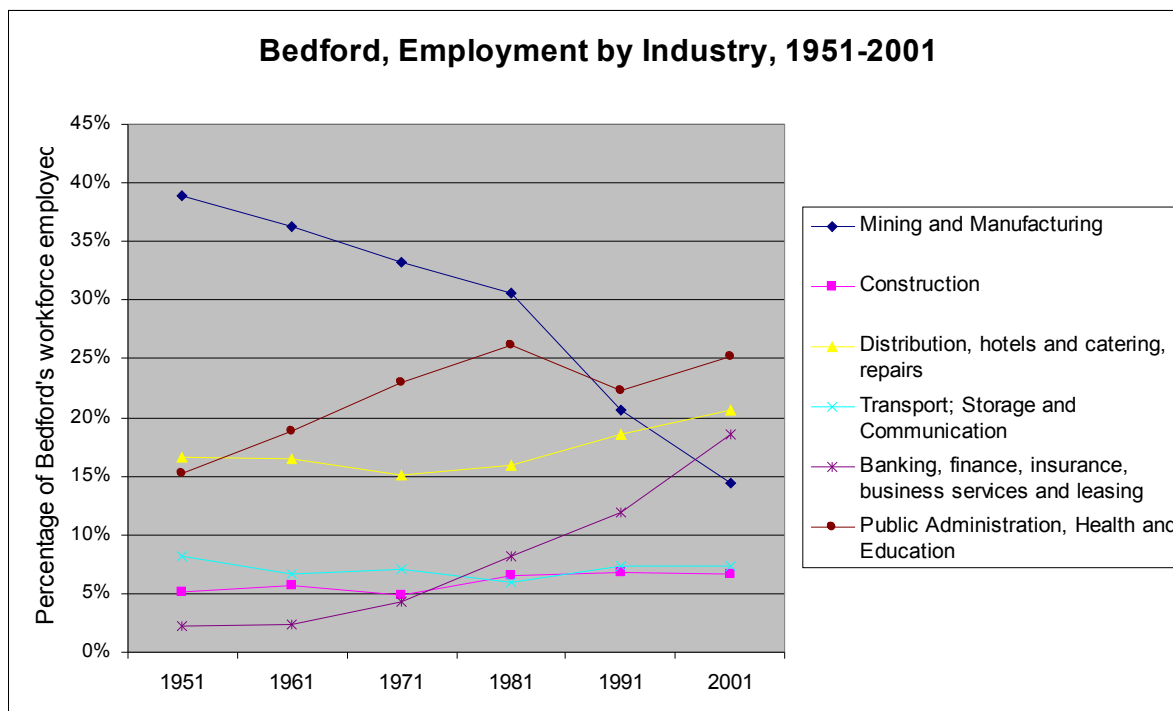
Graph C³⁶ shows how levels of immigration often do not correlate with the presence of ethnic minorities in towns. The proportion of Bedford’s population from an ethnic minority background is considerably smaller than the proportion born overseas. The numbers of ethnic minorities in England and Wales increased by 47% between 1991 and 2001, a dramatic increase compared with Bedford’s 29% rise. This may however understate the effects of past immigration on traditional recipient towns such as Bedford. The children of European immigrants to Britain, born in Britain and holding British passports, are likely to register themselves in the “White: British” category on the census form, rather than “White: Other White” which their parents may have ticked, as might the children of mixed ethnic backgrounds.

5.2. Industry and Services



Graph D

³⁶ Data used to construct Graph C is from 2001 Census, Theme Table on Ethnicity



Graph E

Graph D and Graph E³⁷ show Bedford and the nation as a whole to have undergone quite different experiences to arrive at very similar industrial structures. Firstly, Bedford's *Public Administration, Health and Education* sector grew much faster than that of the country between 1951 and 1981, before contracting in the 1981-1991 period, the height of anti-bureaucratic Thatcherite neoliberalism, and growing again to return to a level close to the national average in 2001. Since this must be the result of the decision-making processes of Central and Local government, I will subject it to no further analysis.

Secondly, as already mentioned, the discontinuity in manufacturing, constituting the deindustrialisation process, takes place later in Bedford than in the rest of the country. Thirdly, the growth of the *Distribution, Hotels and Catering and Repairs* sectors is slower and more gradual after 1971 in Bedford than in the rest of the country. Fourthly, the construction sector, having been smaller in Bedford than the rest of the country in 1951-1971, grows to attain the same size as the rest of the country between 1971 and 1981, where it remains steady.

For Table 1, I have divided the percentage of Bedford's workforce employed in each occupational category by the percentage of Great Britain's workforce employed in the same category, to show employment by occupation in Bedford as a proportion of Great Britain's average.

³⁷ For Graph D and Graph E I use data from the 1951, 1961 and 2001 Censuses for England and Wales, and the 1971, 1981 and 1991 Censuses for Great Britain. Information on Bedford or North Bedfordshire for 1951, 1961, 1971 and 1981 is found in the Economic Activity County Report. For 1991 tables on *Employment by Industry* are available in the County Leaflets. All data for 2001 is obtained in electronic form in the National Report for England and Wales CD. I have divided the numbers employed in each category by the number categorised as both *Economically Active* and *In Employment* to give the percentages.

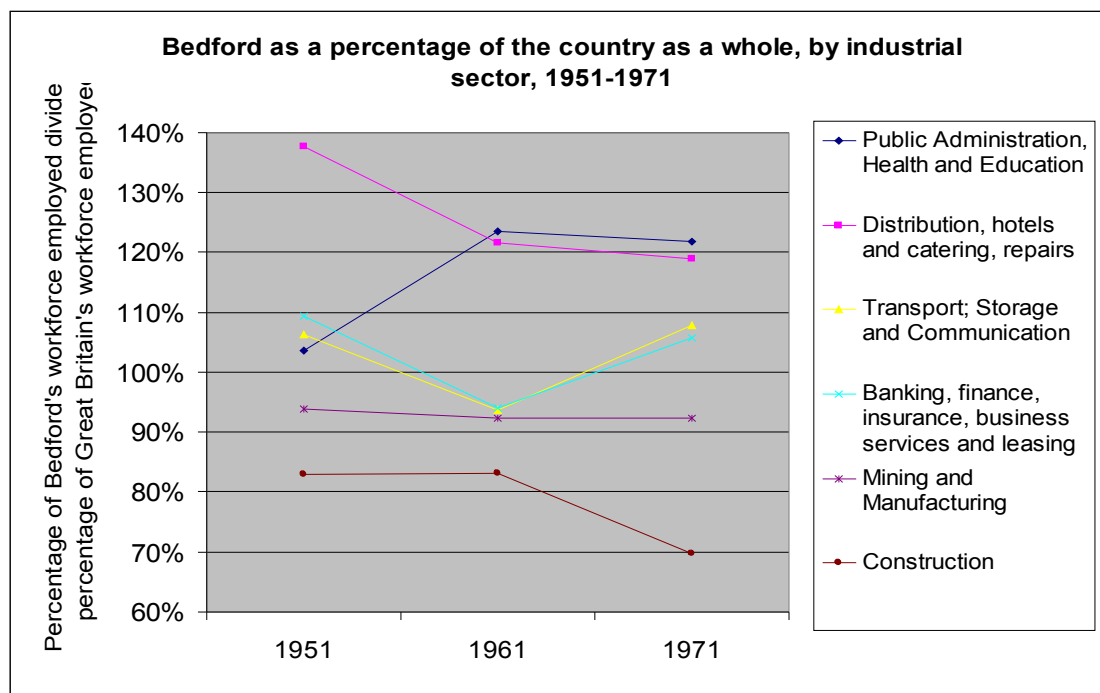
<i>Bedford as a Percentage of Great Britain</i>	<i>1961</i>	<i>1971</i>
Farmers, foresters, fishermen	29%	22%
Miners and quarrymen	3%	3%
Gas, coke and chemical makers	17%	26%
Glass and ceramics makers	386%	484%
Furnace, forge, foundry rolling mill workers	98%	64%
Electrical and electronic workers	134%	116%
Engineering and allied trades workers n.e.c.	102%	117%
Woodworkers	96%	95%
Leather workers	42%	13%
Textile workers	2%	9%
Clothing workers	81%	90%
Food, drink and tobacco workers	107%	62%
Paper and printing workers	95%	99%
Makers of other products	87%	94%
Construction workers	86%	82%
Painters and decorators	116%	83%
Drivers of stationary engines, cranes, etc	114%	130%
Labourers n.e.c	162%	127%
Transport and communications workers	88%	72%
Warehousemen, storekeepers, packers, bottlers	110%	101%
Clerical workers	102%	95%
Sales workers	92%	92%
Service, sport and recreation workers	104%	105%
Administrators and managers	86%	88%
Professional, technical workers, artists	132%	138%
Armed forces, British and Foreign	92%	98%
Inadequately described occupations	158%	113.00%

Table 1

As shown in Table 1³⁸, eleven occupational categories showed convergence between 1961 and 1971 whilst fourteen showed divergence from the national average, and two remained unchanged. This was a period of divergence from the national economic occupational norm. Notable areas of growth and divergence, where the town already had a disproportionately large share of employment in an occupation but for which its lead increased, included *Glass and Ceramics Makers* and *Engineering and Allied Trades Workers n.e.c.*³⁹, whose relative shares of the workforce rose from 385% to 484% and from 102% to 116% of the national average respectively. Nine categories, however, experienced both divergence and decline, which means that the town was losing professions in which it already had disproportionately low levels of employment. Such trends may suggest regional specialisation was occurring in the national economy, whereby localities concentrate production in those areas for which they are best suited, or in which they have a comparative advantage.

³⁸ For Table 1, I have divided the percentage of Bedford's workforce employed in each occupational category by the percentage of Great Britain's workforce employed in the same category, to show employment by occupation in Bedford as a proportion of the Great Britain average.

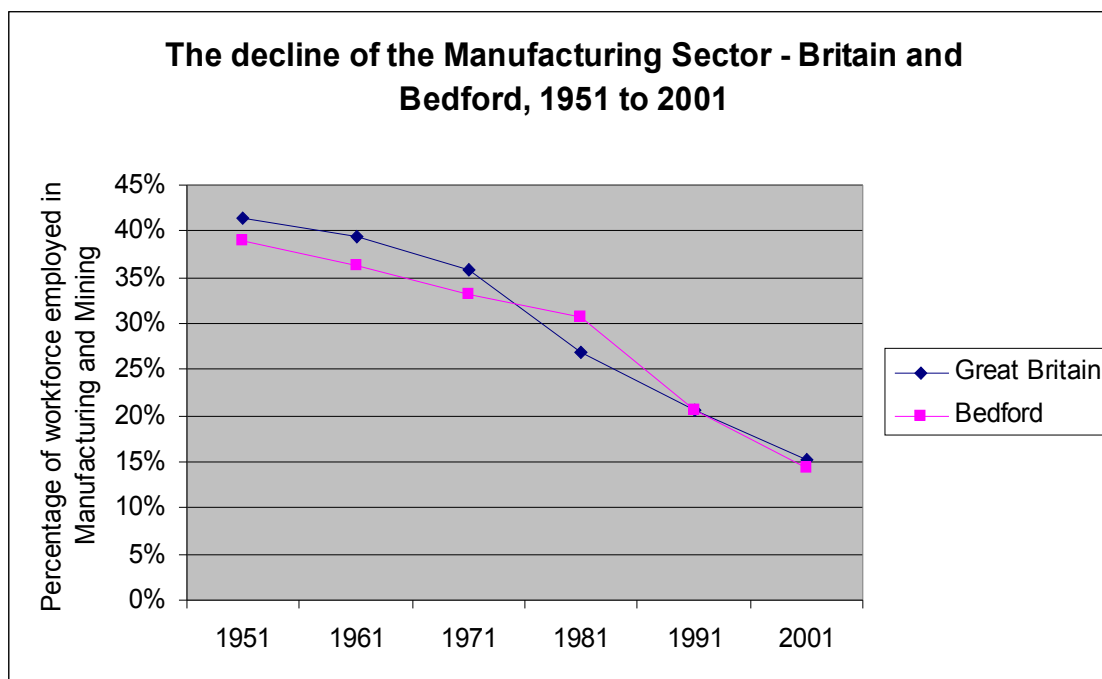
³⁹ Not Elsewhere Classified



Graph F

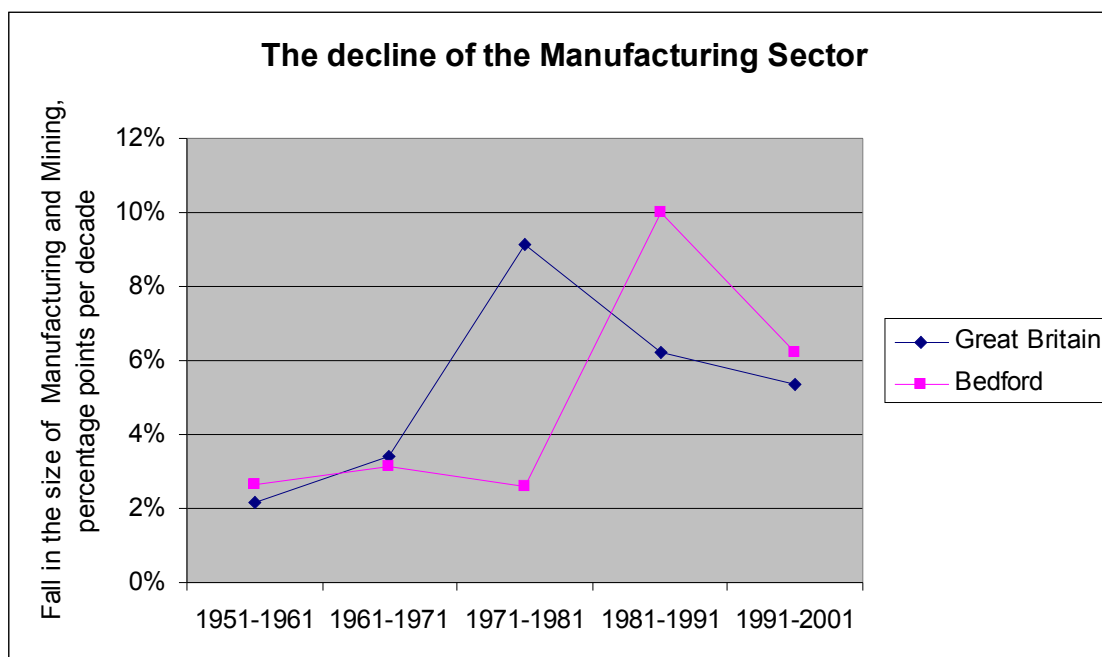
Graph F⁴⁰ shows how *Public Administration, Health and Education* increased its share of the labour force at the same time as employment in *Distribution, Hotels and Catering, Repairs* decreased. The former, the size of which is dependant purely upon decisions made by public officials with no input from market forces, starts the period in 1951 at 104% of the national average, and from there rises sharply to 124% of the national average, before receding slightly to 122% in 1971. *Distribution and Catering*, on the other hand, starts at the remarkably high level of 138% of the national average, and falls to 122% in 1961 and 119 % in 1971. Construction begins the period at 83% of the national average in its share of employment in 1951 and 1961, and from there falls to 70% in 1971. This seems very counter-intuitive in such a rapidly growing town, which ought therefore to have a strong demand for housing and a large construction sector. It may therefore be a sign of low wages, resulting from an inward flux of migrants, which keeps the demand for housing low. Otherwise it might simply be that there was a shortage of land to build on due to Green Belt restrictions.

⁴⁰ Graph F uses the same data I collected for Graph D and Graph E. The percentage of Bedford's workforce employed in each industrial category is divided by the equivalent percentage employed in England and Wales for 1951 and 1961, and for Great Britain for 1971.



Graph G

A focus on Bedford’s manufacturing sector reveals that for most of the 1951-2001 period it employed a slightly smaller proportion of Bedford’s workforce than the national average, with the exception of 1981. During this year it employed 31% of Bedford’s workforce, compared with 27% of the workforce of Britain as a whole.



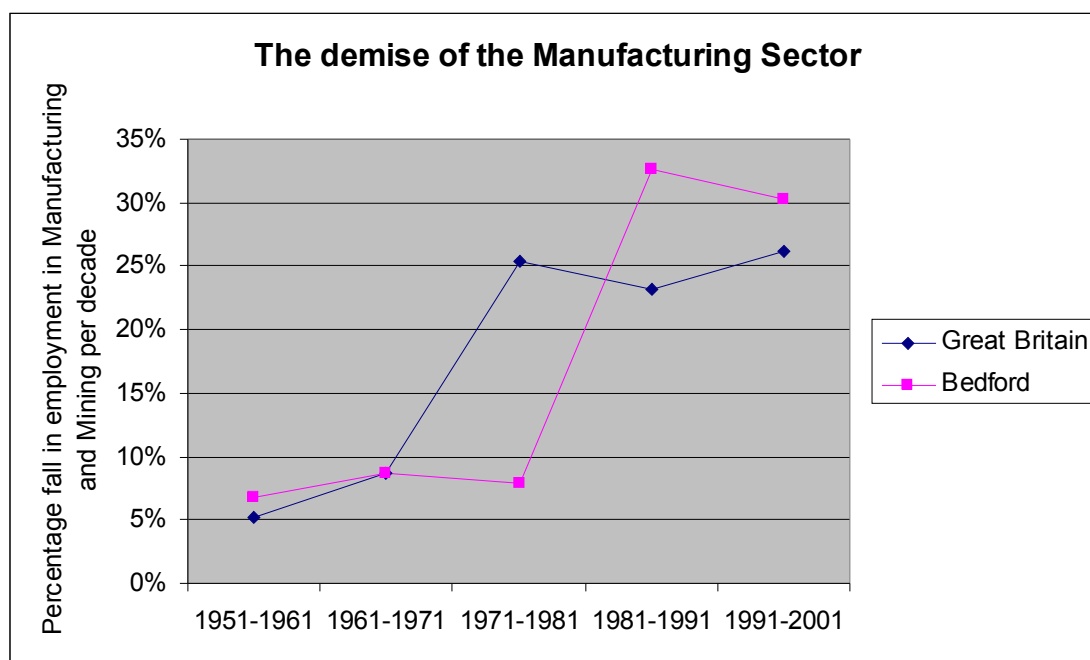
Graph H

The trend is made much clearer by focusing upon the year in which manufacturing employment begins to fall most rapidly. As shown in Graph H⁴¹, a dramatic fall of 9% and 10% occurred both in Bedford and Great Britain as a whole, but occurred in Bedford a decade later

⁴¹ Graph H is produced by subtracting the percentage employment in *Manufacturing and Mining* in the first period from employment in the same category in the second period.

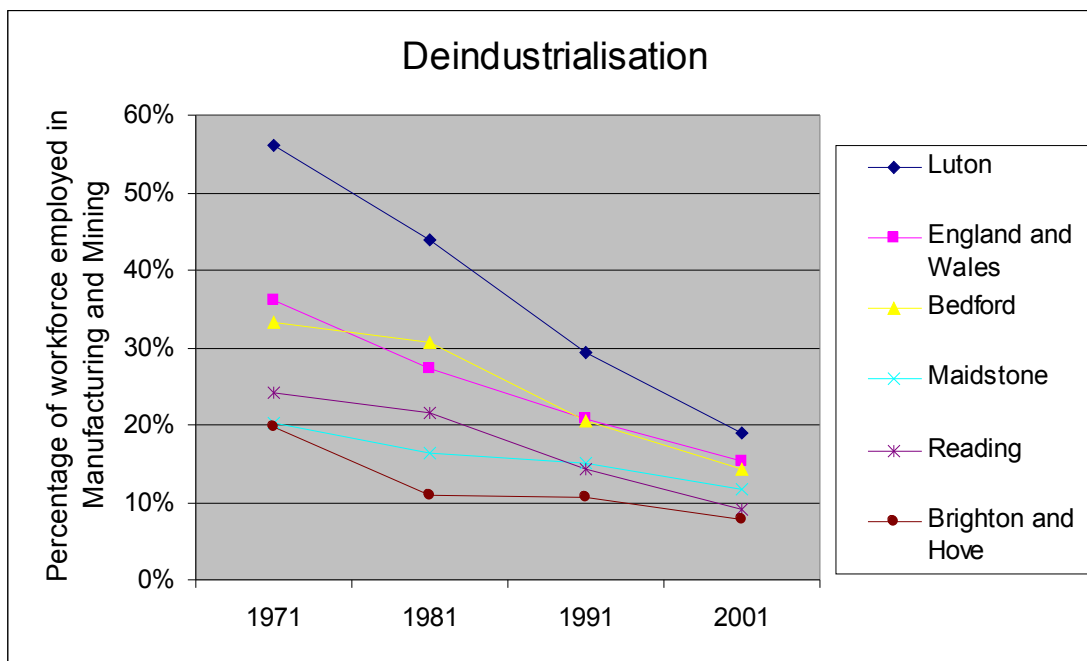
than the national average. This would suggest that an exogenous factor was delaying the natural process of deindustrialisation in the town.

Graph I⁴² shows that if the falls in manufacturing employment are viewed as percentages of manufacturing employment in the first period rather than percentage points of total employment, we can see the falls in the manufacturing sector have not slowed down – deindustrialisation has been an ongoing process. The diminished importance of the process today is due to the smaller absolute and relative size of manufacturing employment in our economy, not due to a slowing of the collapse of the sector. So today when there is a recession in manufacturing, unemployment in the economy as a whole rises less than would have been the case in the past, when the economy was more dependant upon the sector. Furthermore, we can see that the process of deindustrialisation has been sharper and more intense for Bedford, with falls of 33% for 1981-1991 and 30% for 1991-2001, compared with falls of 25% and 23% for Britain for 1971-1981 and 1981-1991, though the total reduction in Britain’s manufacturing thus far has been greater than that for Bedford due to the protracted, ongoing nature of the process



Graph I

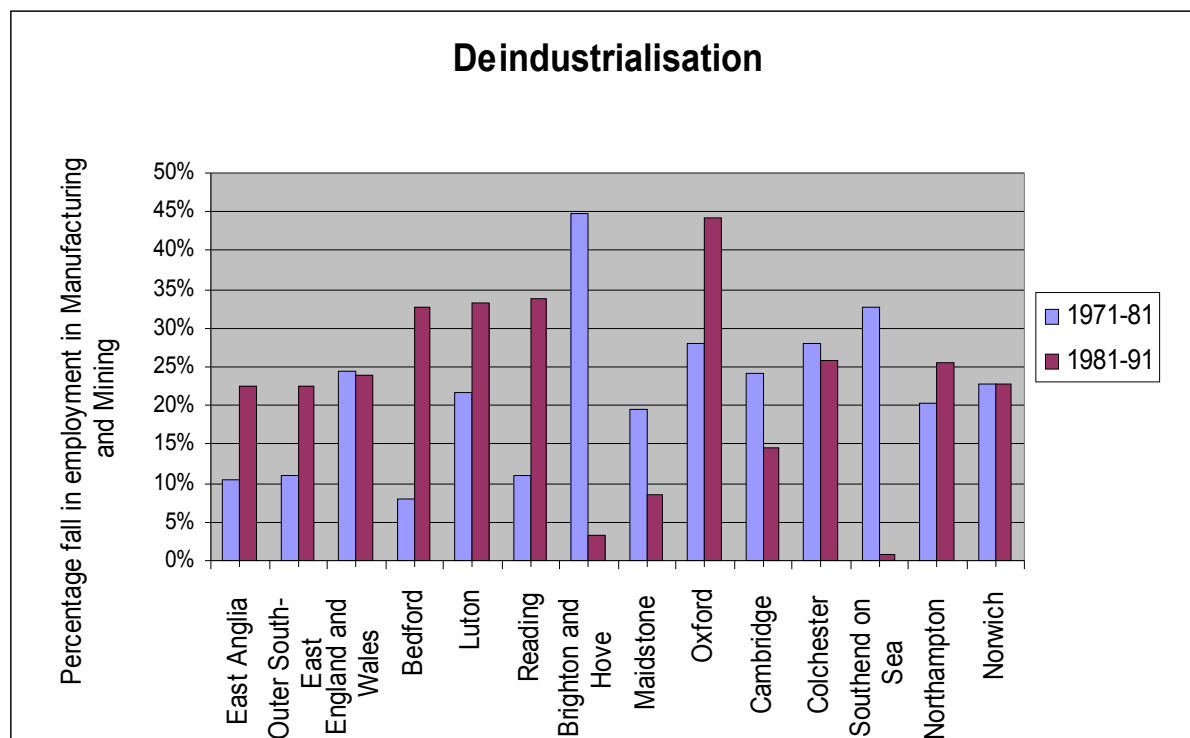
⁴² Graph I is made by subtracting the percentage employment in *Manufacturing and Mining* in the former period by the latter period, as is the case for Graph H, and then dividing the result by the percentage employed in the former period.



Graph J

Graph J⁴³ compares employment in manufacturing in Bedford with other towns in different regions of England and Wales, over the period 1971-2001. All show persistent, terminal decline of employment in manufacturing. Those with the highest employment in manufacturing experienced the most accelerated decline. Other than Reading and Maidstone changing positions, the ranking of workforce share at the beginning of the period remains the same at the end of the period. Three of the lines have an upwards kink at the 1981 mark, and three a downwards kink. An upwards pointing kink, as is the case for Luton, Bedford and Reading - all towns which received high level of immigrants from abroad - shows that the rate of decline of manufacturing was greater between 1981 and 1991 than it had been between 1971 and 1981. A downwards kink, shown by Brighton and Hove, Maidstone and England and Wales as a whole - towns that hosted little immigration compared with the previous three towns, indicates the fall in manufacturing employment during 1971 to 1981 was greater than during the 1981 to 1991 period.

⁴³ The data for Graph J is also obtained from Economic Activity County Reports for Census' of 1971-1981, and from the County Leaflets for 1991. For the period 1981 the Data in the Economic Activity County Report was only available in Micro file. The copy available in the LSE library was unreadable - the library explained the copy was photographed poorly, which required me find alternative arrangements - I was able to get the Census data for these graphs from the British Library.



Graph K

Graph K⁴⁴ illustrates these findings more clearly. The fall in manufacturing employment is calculated as a percentage of employment in the first period. Bedford's experience of lower industrial decline in the 1970s than the 1980s was shared by other towns with similarly high levels of immigration – namely Luton, Reading and Oxford. Towns with fewer ethnic minorities than Bedford encountered early deindustrialisation: Brighton and Hove, Maidstone, Colchester, and Southend on Sea.

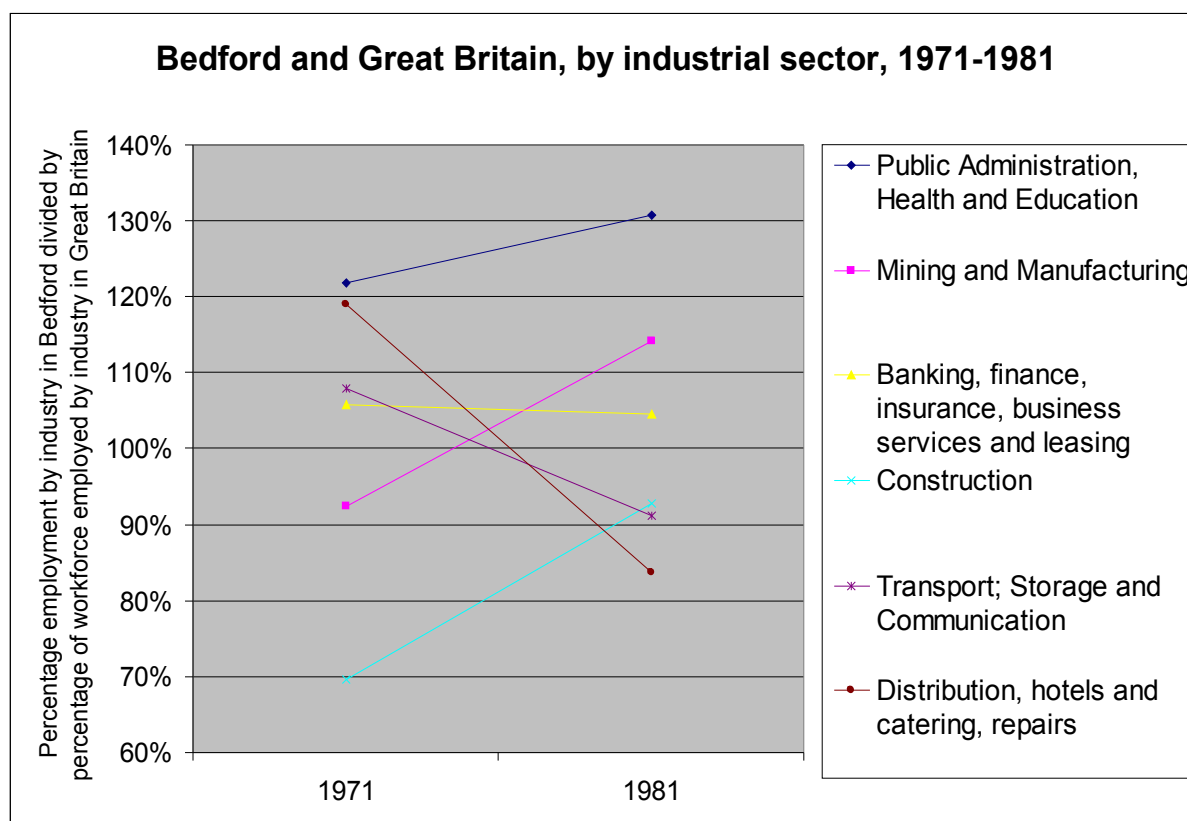
However, there were some anomalous results. The regions of East Anglia and the Outer South East have few ethnic minorities but both deindustrialised late. Cambridge has many ethnic minorities but deindustrialised early. Northampton comprises approximately the national average of ethnic minorities and deindustrialised late, whereas Norwich has very few ethnic minorities and experienced a constant rate of deindustrialisation in both periods, similar to the national average.

One possible explanation might be that areas with a high proportion of their population in manufacturing experienced deindustrialisation later than those with a low proportion of their workforce in manufacturing. This would explain why Brighton and Hove and Maidstone exhibit the greatest difference between the percentage decline in their manufacturing sectors in 1971-81 and 1981-91.

However, this does not explain all the anomalies. The regions of East Anglia and the Outer South-East also started the deindustrialisation period with low levels of manufacturing but

⁴⁴ For Graph K I have taken the fall in employment in *Manufacturing and Mining* as a proportion of employment in the former period in the same manner as in Graph I, for the state towns and regions. As explained above, the 1981 data was obtained from the 1981 Census in the British Library.

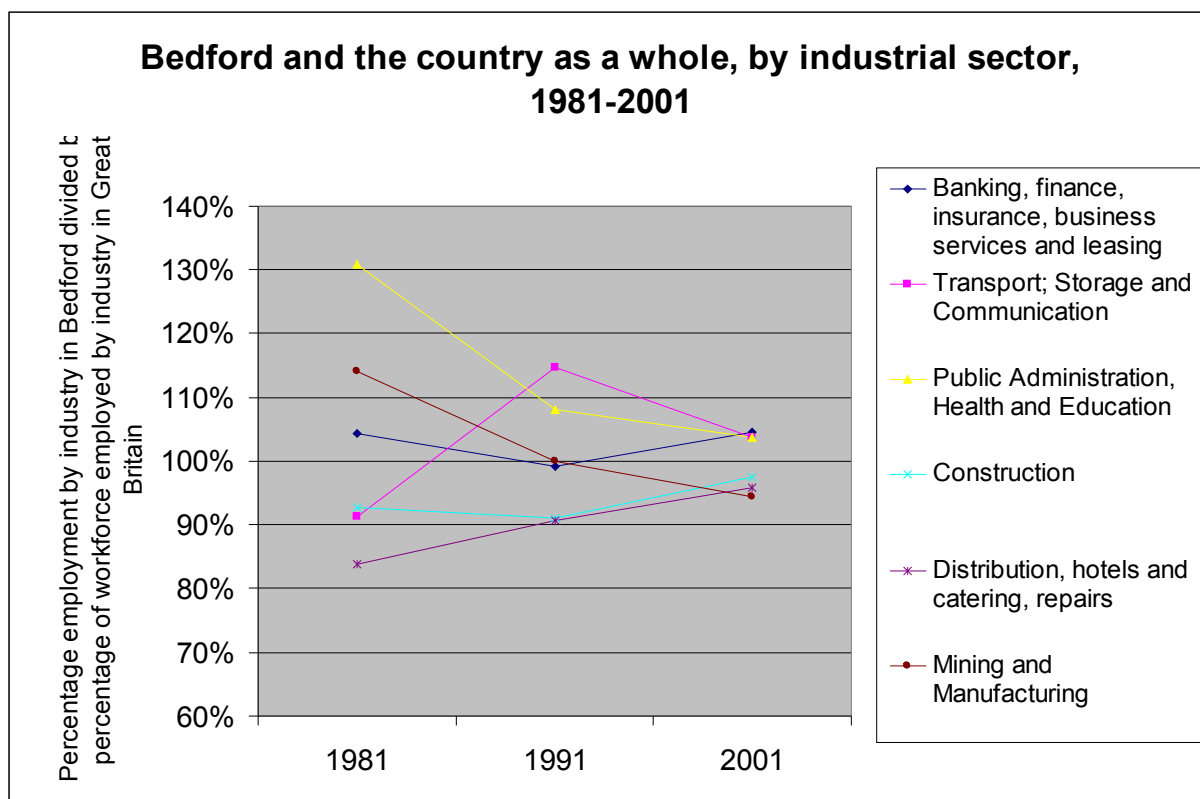
experienced late deindustrialisation, as with Reading. A more acute explanation may be that East Anglia, the Outer South-East and Northampton evinced high growth rates of population due to immigrants from other parts of the UK, being on the edge of London's Green Belt, and so prime locations for housing development. This internal migration to other parts of the UK might have had an impact similar to that of immigration from abroad in suppressing wages and delaying deindustrialisation. It is more probable that immigrants to Cambridge came to attend the university than to work in manufacturing. This was not the case for Oxford, as it is a larger city, the economy of which is less dominated by its university.



Graph L: Divergence and Convergence with the Great Britain average 1971-2001

The 1970s were a very special period for Bedford. As Graph L⁴⁵ shows, the share of employment in rose in *Mining and Manufacturing*, *Construction* and *Public Administration, Health and Education*, whilst falling in *Transport, Storage and Communication* and *Distribution, Hotels and Catering, Repairs* as a proportion of Great Britain's average. These patterns show Bedford to be singularly out of harmony with the rest of the UK. Only *Banking, Finance, Insurance, Business Services and Leasing* stayed fairly constant.

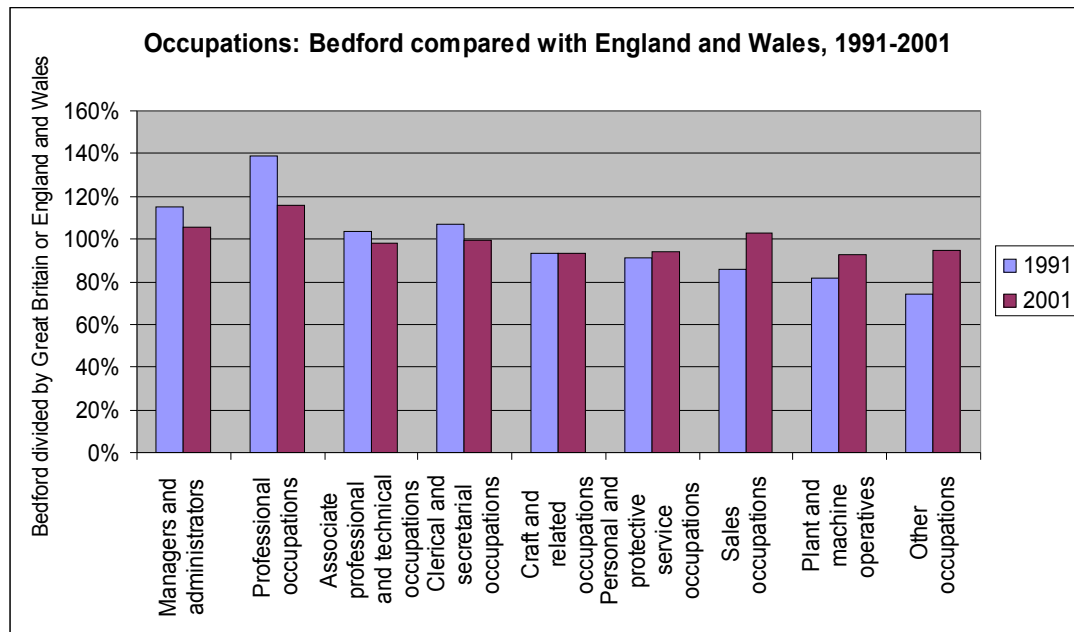
⁴⁵ Graph L is produced in the same manner as Graph F.



Graph M

In sharp contrast with the 1970s, Graph M⁴⁶ shows the 1981-2001 period to be one of convergence. In seven out of nine sectors, Bedford experienced convergence between 1981 and 2001. Excluding the smaller sectors (*Agriculture, Forestry and Fishing* and *Energy and Water Supply Industries*, and the poorly defined *Other*) the larger employers, *Mining and Manufacturing*, *Construction*, *Distribution, Hotels and Catering, Repairs*, *Banking, Finance, Insurance, Business Services and Leasing* and *Public Administration, Health and Education* all experienced convergence. The exception is *Banking, Finance, Insurance, Business Services and Leasing*, which grew by 1% relative to the country as a whole. The rise of *Distribution, Hotels and Catering, Repairs* relative to the country in the period 1981 to 2001 mirrors the decline of *Mining and Manufacturing*, though less than proportionally. In 2001 the sector was still proportionally smaller than the national average. There is therefore no sign that any exogenous force, such as the entrepreneurial tendencies of immigrants, facilitated the transition from manufacturing to services.

⁴⁶ Graph M is constructed in the same manner described for Graph F.

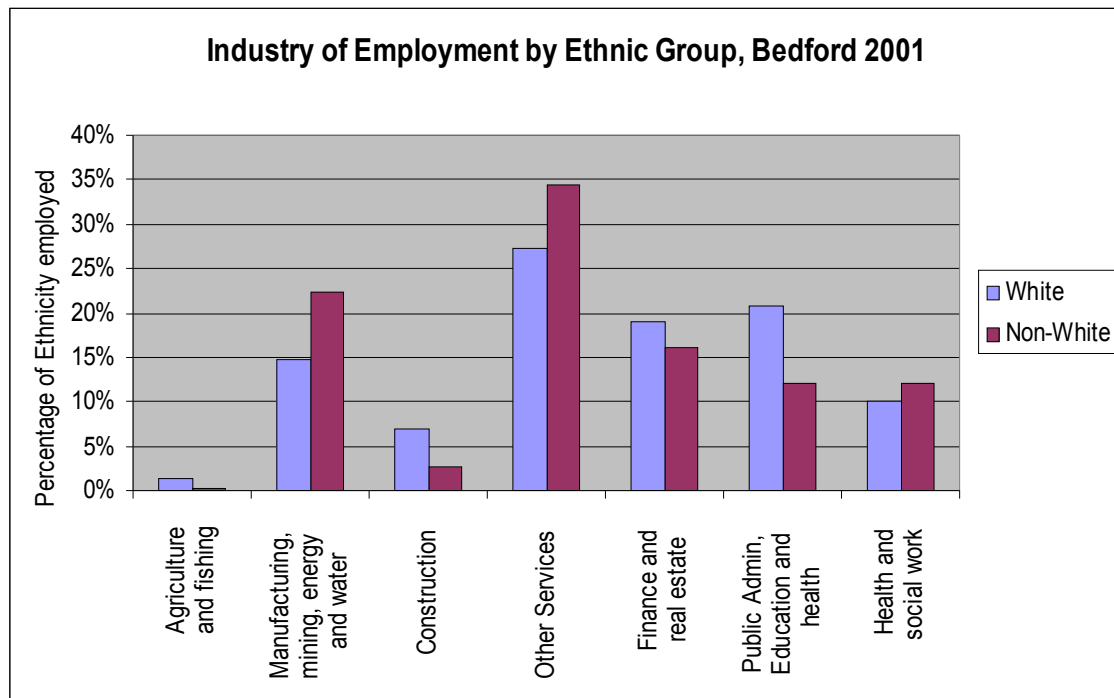


Graph N

Graph N⁴⁷ shows Bedford's convergence with the national occupational tendencies between 1991-2001 in almost every occupational category, supporting the findings of Graph M. The greater the difference between the proportion of the workforce in Bedford and Britain in 2001, the greater the convergence.

Between 1991 and 2001, eight out of nine occupational categories experienced convergence between Bedford and the country as a whole. This is in sharp contrast to the diverging occupational structure of 1961-1971. None of the occupational classes diverged during this 1991-2001 period. This might be the result of reduced information costs, reducing the benefits of agglomeration. With fewer economies of scale, firms are encouraged to spread out across the country, as high information costs were the basis of the need to concentrate production in one area.

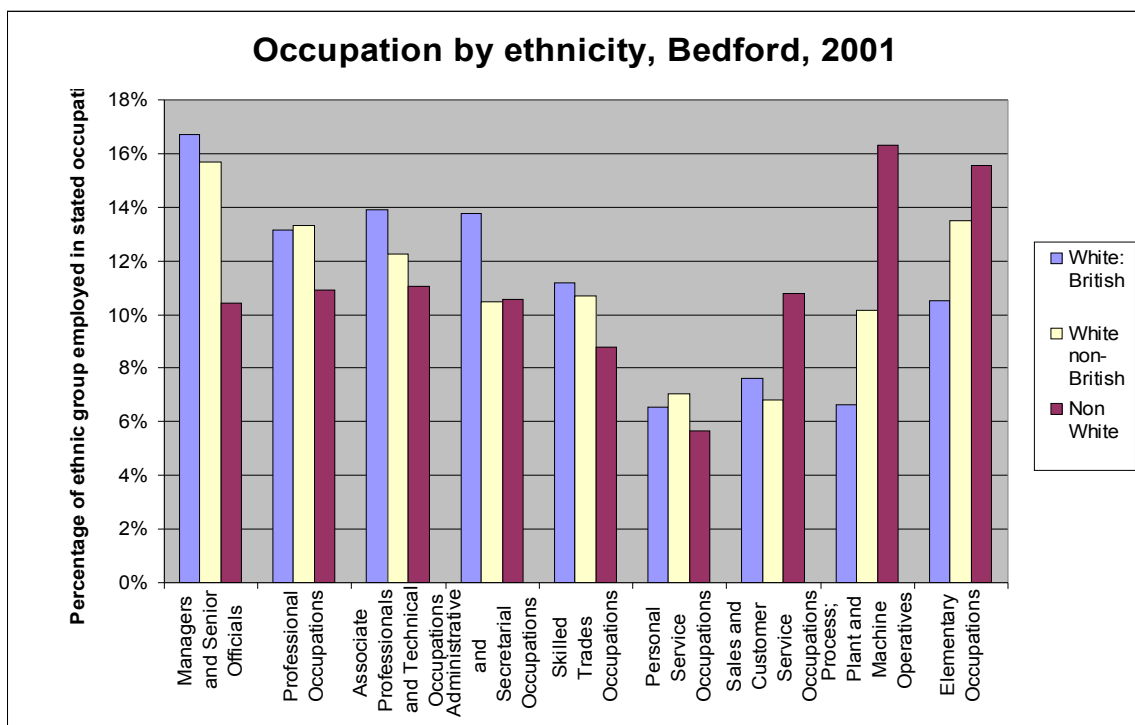
⁴⁷ Data for Graph N was obtained from the 1991 Census Economic Activity report for Great Britain and the County Leaflet for Bedford. It is constructed from the table on *Employment by Occupation* for Great Britain for 1991 and *Sex and Occupation by Hours Worked* for 2001. The percentage employed in Bedford is divided by the percentage employed in the whole country in the same manner as Table 1.



Graph O

Non-white ethnic minorities are, according to Graph O⁴⁸, more likely to work in both manufacturing (14.8% white, 22.3% non-white), services (27.2%, 34.5%) and health care (10.1%, 12.1%). White Britons and white ethnic minorities are more likely to be farmers (1.5%, 0.3%), builders (7%, 2.8%) teachers and public servants (21.7%, 12%), and accountants and real estate agents (18.9%, 16.1%). The disproportionate number of non-white persons working in the *Other Services* category as opposed to the more highly skilled and higher paid service categories such as *Finance and Real Estate* may suggest that ethnic minorities dominate lower skilled professions. That immigrants dominate this section of the service sector does not mean they are entrepreneurs, though it may signify benefits to this sector from a flexible labour force.

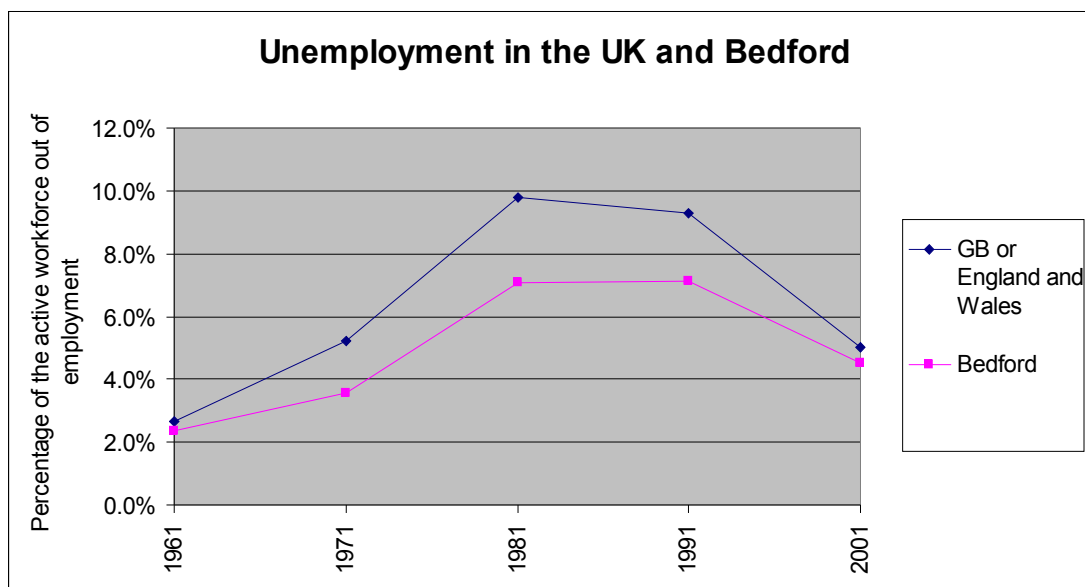
⁴⁸ Graph O is constructed with data from the table *Sex and Industry by Ethnic Group* for Bedford from the 2001 Census National Report. The *White* category includes those classed as *White: British White: Irish* and *White: Other White*. The *Non-White* category is the sum of all other groupings.



Graph P

Graph P⁴⁹ shows that in 2001, ethnic minorities – particularly but not exclusively non-whites – are concentrated towards the lower end of the occupational spectrum, in lower skilled jobs.

5.3. Unemployment and Commuting



Graph Q

⁴⁹ Graph P is constructed from the “Theme Table on Ethnicity” in the 2001 Census National Report. *White Non-British* is the sum of *White: Irish* and *White: Other White*.

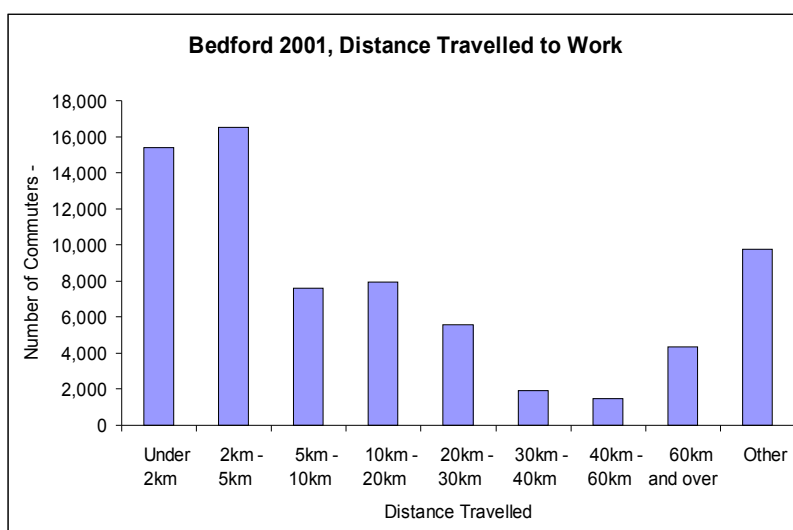
	1971	1981	Increase
Luton	3.1%	9%	190%
Mid Bedfordshire	2%	4.2%	110%
North Bedfordshire	3.2%	6.4%	100%
South Bedfordshire	2.5%	6.2%	150%
Bedfordshire	2.8%	6.7%	140%

Table 2: Unemployment in Bedfordshire from 1971 to 1981

Graph Q⁵⁰ shows unemployment in Bedford to be constantly below the national average between 1961 and 2001. Unemployment in Bedford and the country as a whole rose from 1961 to 1981, Bedford less so than Great Britain. Both fell sharply during the 1990s. By 2001, Bedford’s total percentage of the unemployed remains lower than the national percentage, though with a considerably smaller divergence from the national total than at any time since 1961.

Significantly, unemployment in Bedford increased between 1981 and 1991 when that of the rest of the country fell. This may be symptomatic of the process of deindustrialisation taking place later in Bedford than in the country as a whole. Rapid structural change leaves unemployed persons with the inappropriate set of skills to find work in the new expanding service sectors, and therefore creates a higher level of unemployment than would be the case in for any given macro-economic climate without structural change.

It is clear that those parts of the country within commuting distance of London generally show lower levels of unemployment than the rest of the country. Persons who commute to work in another area act as exports, raising the level of aggregate demand in the host town, lowering unemployment via the multiplier effect. I will therefore examine the scale of commuting to London from Bedford.

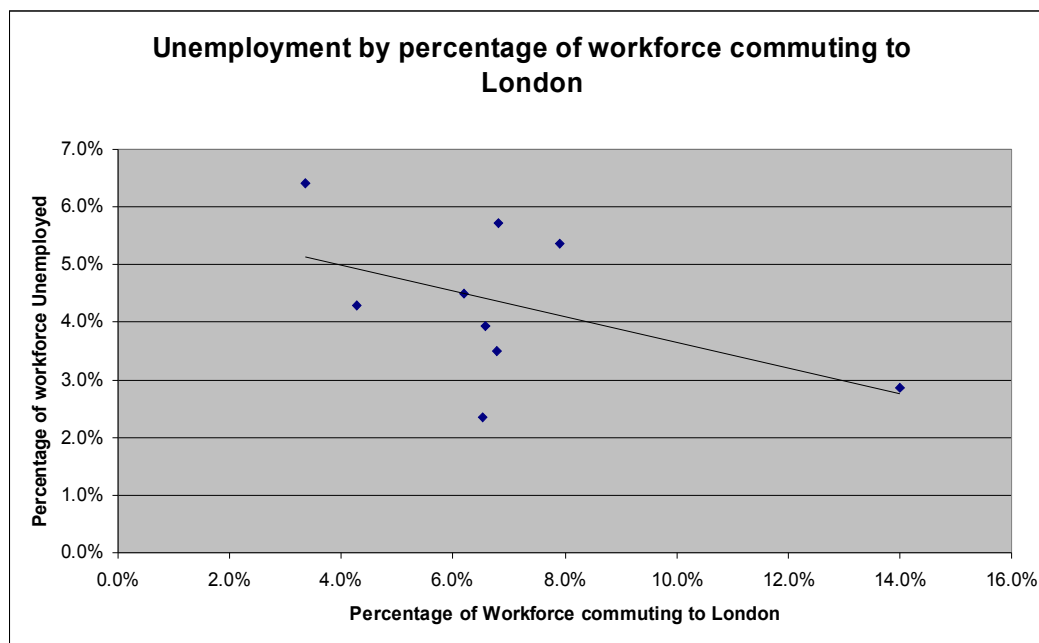


Graph R

⁵⁰ The Data for Graph Q comes from Economic County Leaflets for Bedford M.B., North Bedfordshire and the Bedford Borough, and from National Reports on Economic Activity for Great Britain and England and Wales. The unemployed are those classified as *Economically Active* but out of employment. They include those on sick leave, since for some periods these persons are not registered separately from those otherwise *Out of Employment*. The *Unemployment* total is divided by the *Economically Active* total.

A majority (56%) of employed persons in the Bedford Borough lives within ten kilometres of his/her workplace⁵¹. Only 6% travel more than 60 km to work – most of whom presumably travel to London.⁵² The category “Other” is likely to be dominated by those who do not travel to work daily, or do not work in a fixed location, such as many of those in the transport industry. Therefore it can be ignored.

4363 persons commuted over 60 km to work from Bedford. This in itself is not enough to change the rate of unemployment significantly, but would reduce unemployment by the multiplier effect as explained above.



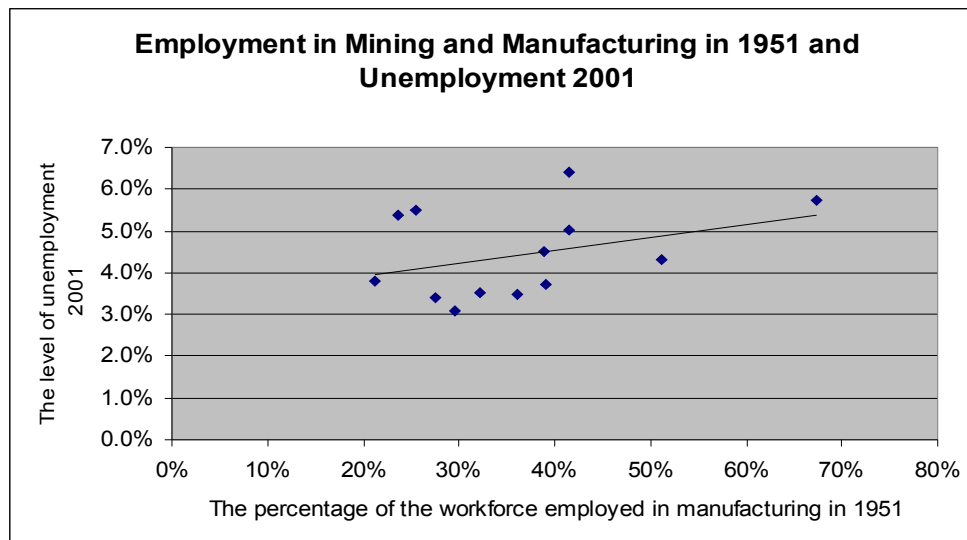
Graph S

Graph S⁵³ shows there is a negative correlation between the percentage commuting and the percentage of the workforce unemployed in towns. Furthermore, the dot that represents Bedford, with 4.5% of the workforce unemployed and 6.2% commuting to London, is directly on the trend line (linear best fit), and therefore exhibits the level of unemployment we would expect for its status as a commuter town.

⁵¹ Graph R is produced from data from the 2001 National Report for England and Wales

⁵² The viability of commuting to work in London varies with the method used to journey there. By train, it is likely that persons from Bedford will work in Central London, which is 70 km or one hour from Bedford. However, Central London is closer to 90 km or up to two hours to reach by road. North London, or specifically Junction 1 of the M1 is 80 km and, in good traffic one hour from Bedford by car, but difficult to reach from Bedford by rail, as it requires changing trains at least once, so although it may be only 60 km from Bedford as the crow flies, it would take over one hour and a half to reach north London by rail, so I will assume those who say they travel between 40km and 60km to work are not commuting to London.

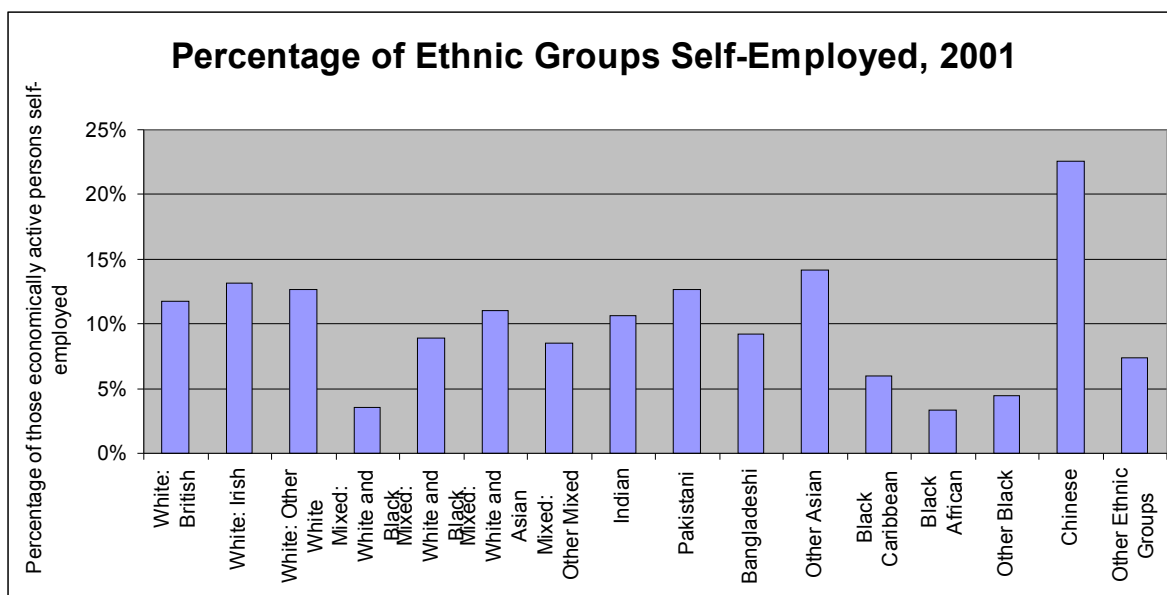
⁵³ Graph S uses data from the 2001 National Report for England and Wales. The towns displayed are from the South East of England and East Anglia: Bedford, Northampton, Milton Keynes UA, Brighton and Hove UA, Luton UA, Reading UA, Norwich, Chelmsford and Guildford. To produce this Graph I measured the distance of the town from London, using an atlas, and have assumed that all those who commute to work from the town the same distance as London is from the town are commuting to London.



Graph T

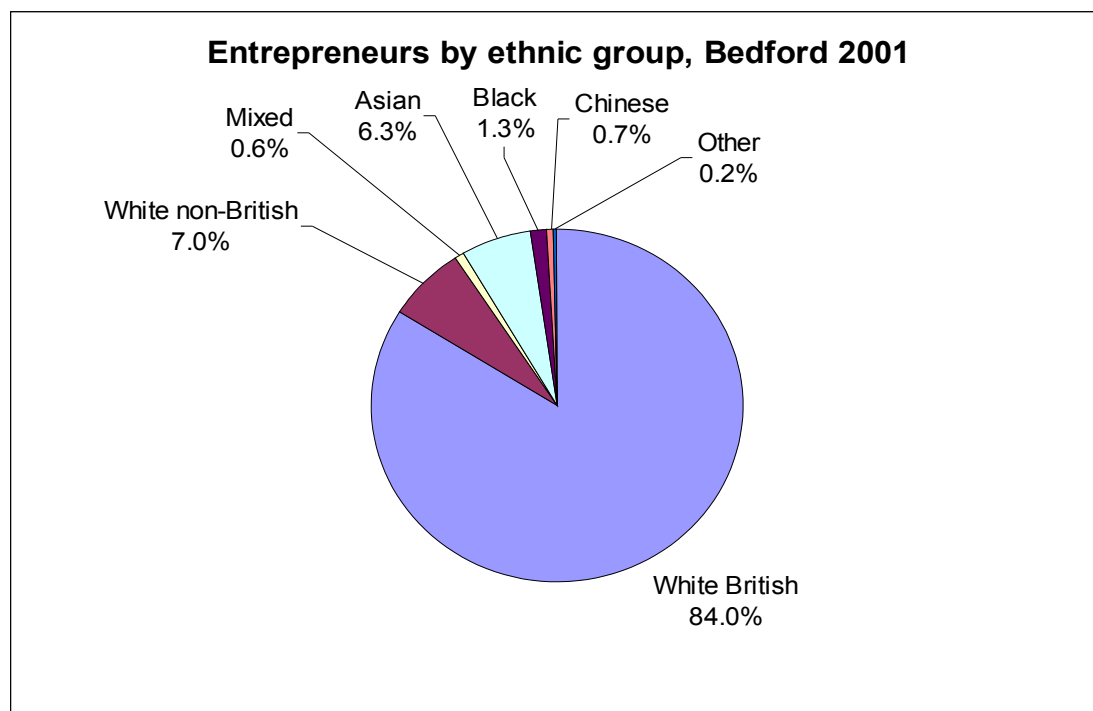
Another factor affecting unemployment may be structural: the result of the collapse of the manufacturing sector. The assumption I am making is that unemployment may be linked to a mismatch of skills amongst the unemployed who were trained to work in manufacturing, with jobs available in industry. Since manufacturing in 2001 employs fewer people nationwide, the larger the manufacturing sector in 1951, the greater the number of people who should be unemployed currently due to a mismatch of skills. Graph T⁵⁴ shows unemployment in 2001 against the size of towns manufacturing sectors in 1951. A positive correlation is found, and again the line of best fit crosses through Bedford, with 4.5% unemployed and 39% of the workforce in manufacturing in 1951.

⁵⁴ To construct Graph T, I collected data from the 1951 Census for England and Wales, and calculated the total employment in manufacturing and mining for the towns in question, before dividing by the economically active population. I then matched this with the unemployment levels from the 2001 Census. The towns used are Cambridge, Southend on Sea, Colchester, Reading, Luton, Northampton, Norwich, Brighton and Hove, Bedford, Maidstone, Ashford, Oxford, and England and Wales as a whole.



Graph U

Graph U⁵⁵ shows that the entrepreneurial inclinations of most ethnic groups in Bedford does not in fact differ much from the “White: British” category. The only groups which are more likely to be self-employed are the Irish, the *Other White* category (most likely to be Italians), the Chinese, the Pakistanis and the *Other Asians*. The only one of these groups with a significantly greater propensity to be self-employed are the Chinese at 23%, compared with a rate of 12% amongst white Britons, but there are too few Chinese in the town to make a difference to the local economy.

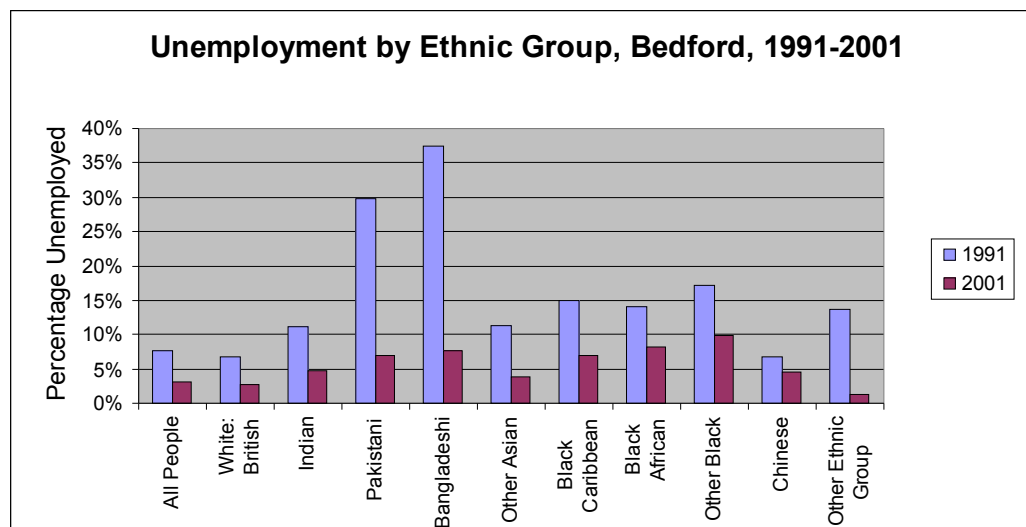


Graph V

⁵⁵ Graph U was constructed from the 2001 Census Theme table on *Ethnicity*.

Graph V⁵⁶ shows those not classed as *White: British* do make up a significant number of self-employed entrepreneurs in the town (16%). The largest groupings of these are those from the Indian Subcontinent, the *Indians*, *Pakistanis*, *Bangladeshis* and *Other Asians* together making up 6.3% of the self employed, and the non-British whites, namely the *White: Irish* and *White: Other*, predominantly Italians, who make up 7% of the self-employed.

5.4. Ethnicity and Unemployment



Graph W

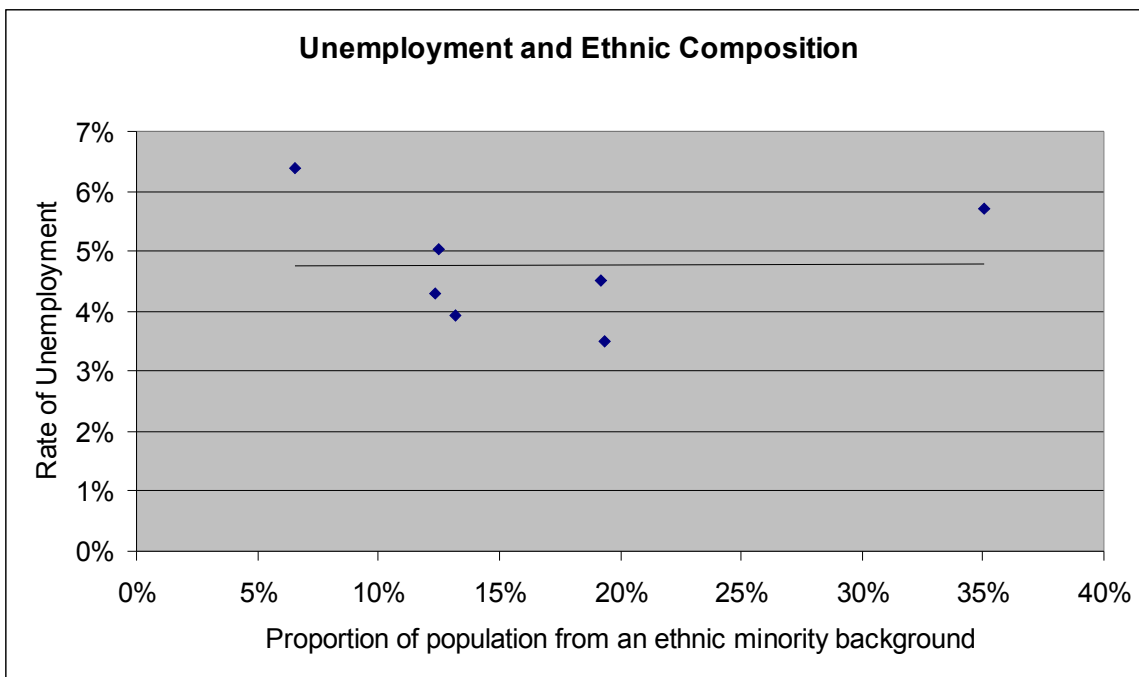
Graph W⁵⁷ demonstrates that, whilst unemployment for all groups fell sharply between 1991 and 2001, unemployment amongst *White: Britons* was either the lowest or second lowest of all ethnic groups.

In 1991, unemployment was highest amongst Pakistanis (29.8%) and Bangladeshis (39.5%). However they also experienced the greatest falls between the two reference periods, to 7.0% and 7.7% respectively in 2001. In their place, those categorised as *Other Black* had the highest unemployment at 9.9%, along with Black Africans, at 8.2%. Together with the *White: British*, the Chinese enjoyed the joint lowest unemployment level in 1991 at 6.8%, but for them unemployment did not fall as fast by 2001, and they were overtaken by those in the *Other Asian* category who experienced 3.8% unemployment against 4.5% for Chinese and 2.7% for white Britons.⁵⁸

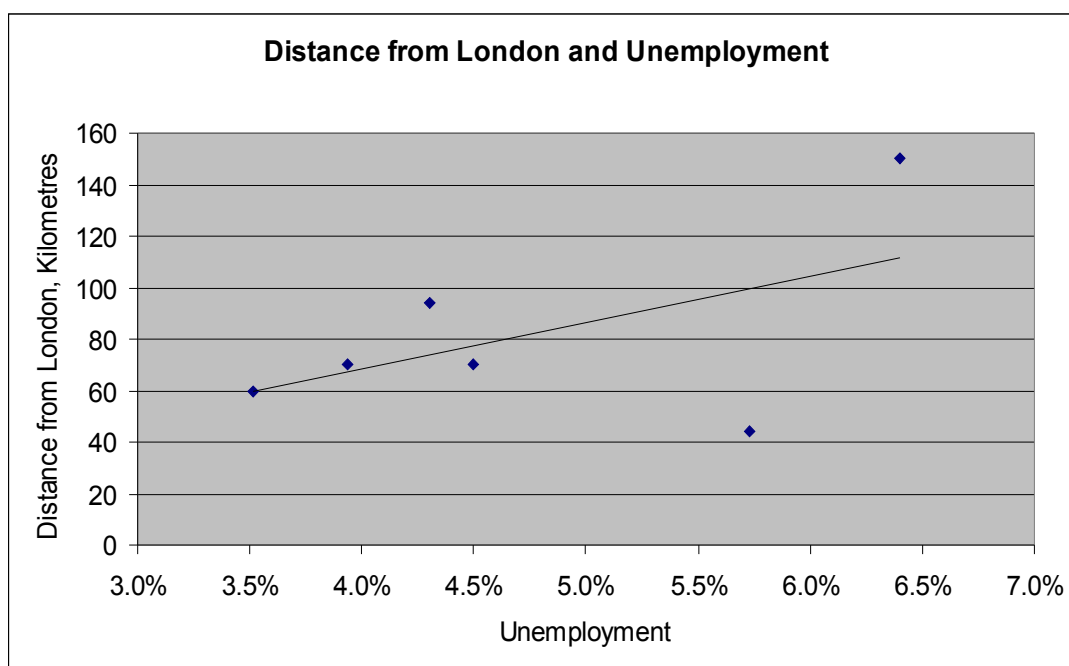
⁵⁶ Graph V is constructed from the 2001 Census Theme table on *Ethnicity*.

⁵⁷ Graph W is constructed from data from the 1991 Census County leaflet for Bedfordshire, Economic Activity by Ethnic Group, and from the 2001 Census Theme table on *Ethnicity*.

⁵⁸ Referring to on four unemployed persons in 2001, the *Other* category is likely to have contracted owing to socio-cultural redefinitions of racial and ethnic identity over the decade. Persons accepting one of the broad categories in 2001 are likely to have classed themselves as belonging to an unnamed race in 1991.



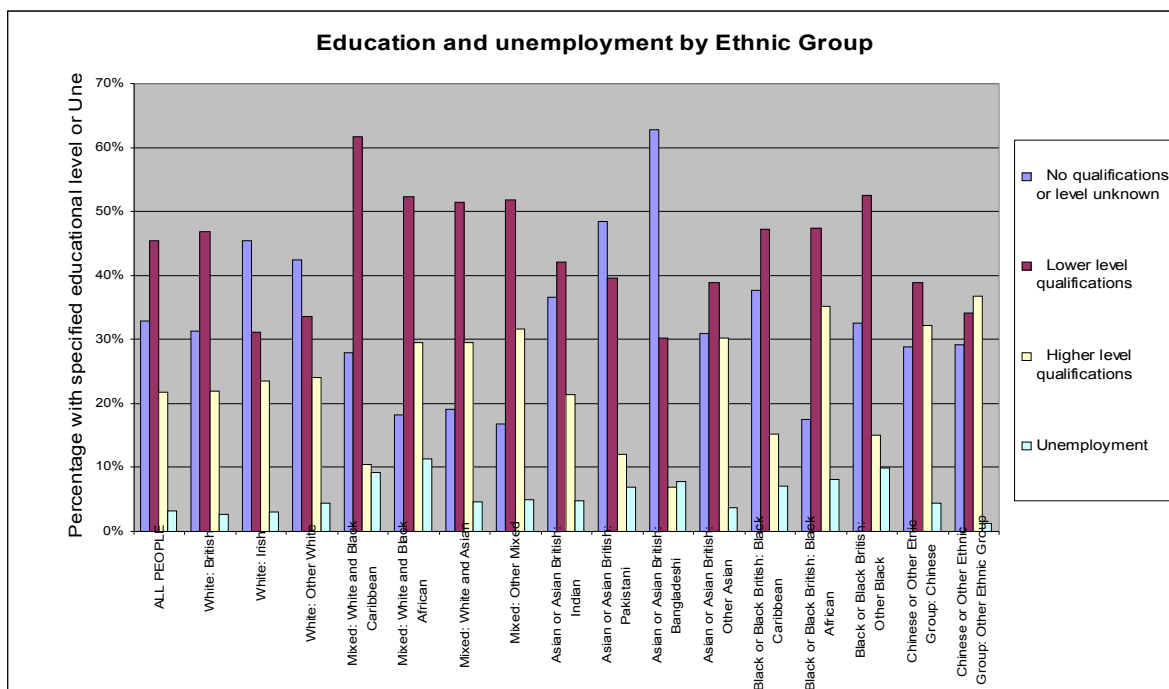
Graph X



Graph Y

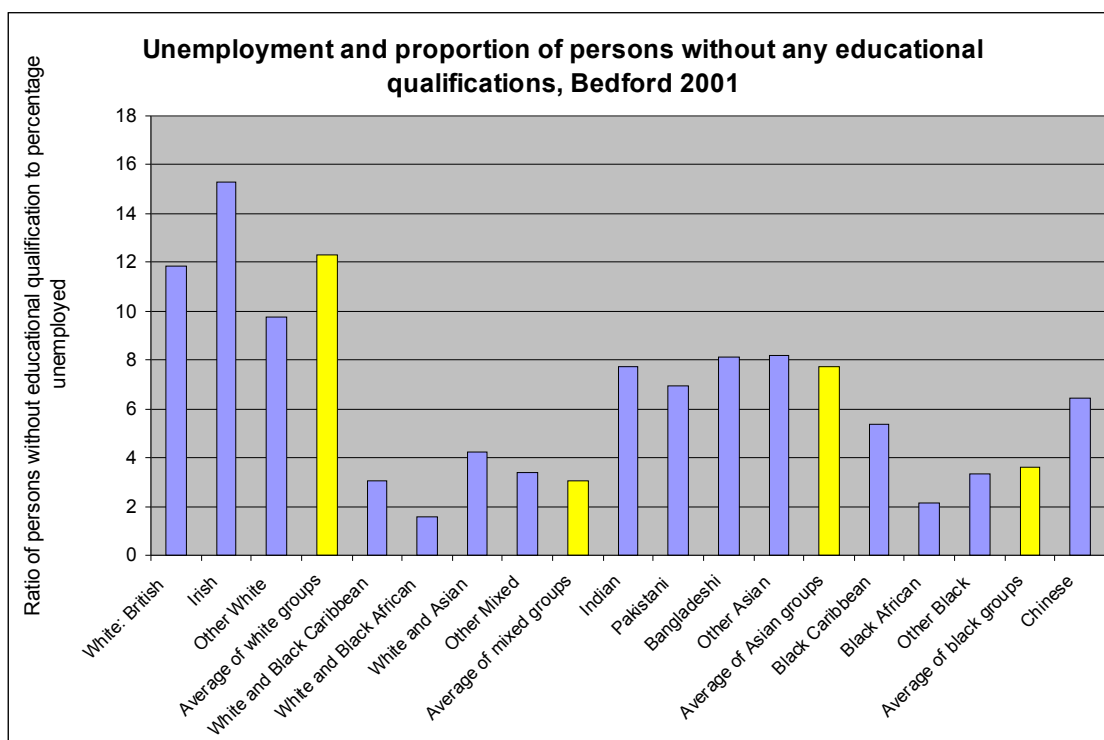
As shown in Graph X and Graph Y⁵⁹, there is a much less ambiguous correlation between unemployment and distance from London than ethnic composition.

⁵⁹ Graph X and Graph Y are constructed with data from the 2001 Census. The towns used are Norwich, Milton Keynes, Luton, Northampton, Reading, and Bedford. Graph X also includes England and Wales, which clearly cannot be placed in Graph Y.



Graph Z

As shown in Graph Z⁶⁰, rates of unemployment are not constant with levels of educational achievement. One may have predicted that unemployment would be highest amongst those groupings where the largest numbers have no qualifications. In fact those groups with the highest unemployment, *Mixed: White and Black African/Caribbean*, are the least likely to leave school with no qualifications.



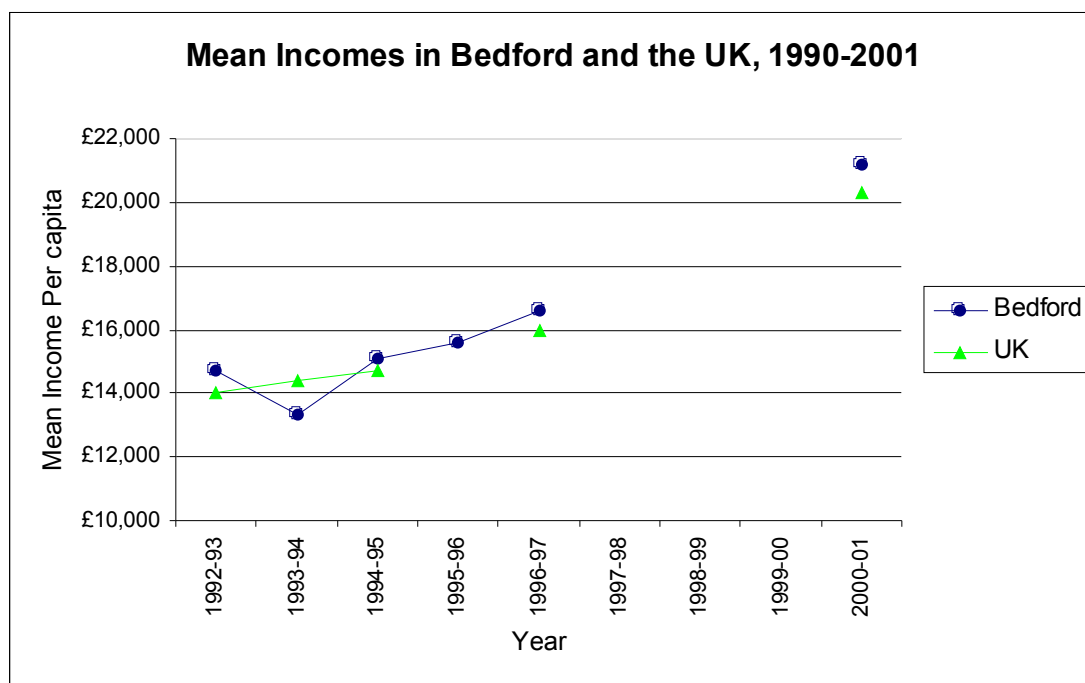
Graph AA

⁶⁰ Graph Z is constructed with data from the 2001 Census, Theme Table on *Ethnicity*.

Graph AA⁶¹ shows the numbers of persons without any educational qualifications divided by the numbers of unemployed for each ethnic group in 2001. It therefore shows that white ethnic groups are able to find work regardless of their level of education; Indians, Pakistanis and Bangladeshis are somewhat able to find work without any skills; but Blacks and ethnically mixed persons have difficulty finding work despite their educational qualifications.

There is a clear correlation between the number of persons unemployed to the number lacking in educational qualifications for people in broad ethnic groupings. Indians may be far less likely to be unskilled than Bangladeshis, but the ratio of lack of skills to unemployment is equal, at 7-8 unqualified persons to every unemployed person, with an average of 8 unskilled persons for every unemployed person amongst *Asian* ethnic groups. Similarly, the *White: British* are considerably less likely to be unskilled than *White: Irish* and *White: Other* categories, but all have very low ratios of unemployment to their abundant uneducated masses – over 10 unqualified persons to every unemployed person (15 for the Irish), and an average of 12 unskilled persons for every unemployed person amongst white ethnic groups. Yet despite the fact that mixed race children are less likely to leave school without qualifications than any other grouping (except Black Africans), they do not have proportionately lower levels of unemployment, but rather the opposite – there are on average only three unskilled persons for every unemployed person amongst *Mixed* ethnic groups.

5.5. Incomes



Graph AB

⁶¹ Graph AA was constructed from data from the 2001 Census Theme Table on *Ethnicity*. Constructing it involved dividing the percentage of the Ethnic Group without any educational qualifications by the percentage of the ethnic group unemployed. The averages are the unweighted mean of the individual ethnic groups comprised.

As shown in Graph AB⁶², Bedford and the UK experienced substantial growth in per capita income between 1991-2001. Inland Revenue Statistics were only able to provide data for the district of North Bedfordshire from 1992-3. A localised recession during 1992-1994 appears to have affected Bedford severely, with incomes falling from £14,700 in 1992-93 to £13,000 in 1993-94, whilst the UK as a whole continued growing. Nevertheless, earnings strongly rebounded to reach £15,100 by 1994-5, an annual increase of 13.5%, and continued to grow strongly to reach £21,200 by 2000-01 at a rate of over 6% per annum.

Having overcome recession, incomes in Bedford appear to maintain a fairly constant level above the national average. This is shown in the table below⁶³.

1992-93	5.0%
1993-94	-7.6%
1994-95	2.7%
1996-97	3.8%
2000-01	4.4%

Table 3: Percentage difference between mean incomes in Bedford and those of the UK

Only in 1993-94 were incomes in Bedford lower than those in the UK as a whole. By 2000-01 the difference between mean incomes of Bedford and the UK had almost returned to the level of 1992-93. I conclude that during the 1990s incomes in Bedford were little different from those in the UK as a whole. Whatever income differences may have caused the divergence in Bedford's fortunes from those of the country as a whole during the 1970s and 1980s had vanished by the 1990s.

6. Interpretation of Results

6.1. Prediction 1

Contrary to my expectations, manufacturing as a share of employment experienced continual relative decline from the beginning of the period in 1951. Nonetheless, my results have shown that the rapid decline that characterises the process of 'deindustrialisation' took place in Bedford one decade after Britain as a whole as a result of immigration, both foreign and domestic, lowering wages and delaying the collapse of the manufacturing sector. However, whilst immigration may have delayed the onset of deindustrialisation, it has not reduced the full extent of its impact. Although for a short period of time around 1981 Bedford's manufacturing sector employed a higher than average proportion of the workforce, by 2001 the situation approached the national norm whereby Bedford's manufacturers employed a smaller than average percentage of the workforce.

The cases of Reading and Luton, both of which, as shown in Graph C, have received higher levels

⁶² The figures for 1992-93 to 1995-96 are for North Bedfordshire. 1996-97 and 2000-2001 are for the Bedford Borough, which approximates to North Bedfordshire. Those for the UK are for the UK as a whole for all periods. The information used to piece together this graph was obtained by fax from Inland Revenue Statistics

⁶³ Source as Graph AB. The mean of incomes in the UK is subtracted from that of Bedford, and the result divided by that of the UK. A positive number shows incomes in Bedford are higher.

of immigration than Bedford and experienced greater deindustrialisation than the national average, confirm the causality between immigration and delayed deindustrialisation for Bedford. As described Graph K, it is not the case that the size of a town's industry determines the timing of collapse of its manufacturing sector. In 1971 less than half of the proportion of Reading's workforce was employed in manufacturing than Luton's workforce, 24% compared with 56%, yet both experienced delayed deindustrialisation. Rather, the dominant factor influencing the timing of deindustrialisation for Bedford and the towns I compare in the South East of England or East Anglia, must be the effect upon wages of inward migration, whether from abroad or from other parts of the UK.

I interpret this as a qualified verification of my first hypothesis. Over the full period 1951-2001, the manufacturing employment in Bedford's economy rose insignificantly relative to England and Wales. The process of delayed deindustrialisation may have little impact on Bedford's long term economic fortunes.

The fact that once the collapse of manufacturing employment was underway, it took place at a faster rate than was the case in the rest of the country suggests that delayed deindustrialisation may have the opposite effect in the long run – reducing overall employment in manufacturing more than would have occurred had the decline in employment taken place earlier. This could be caused by firms neglecting to invest in labour-saving capital during the 1970s due to the comparatively low costs of labour in towns with many immigrants, being left as a result in the 1980s with a cost disadvantage against their competitors who had already been forced to restructure in the previous period⁶⁴. Therefore the delayed downturn was even more severe, leaving towns like Bedford with even smaller industrial sectors than would have been the case had the collapse occurred earlier.

6.2. Prediction 2

The prediction that the service sector in Bedford would grow faster than in Britain as a whole, has not been confirmed. Most immigrant groups do not have a greater propensity to set up their own businesses than natives (Graph U), and so have not contributed to structural change by creating enterprises in the growth sectors of the new economy.

Even when manufacturing employment began to contract quickly, the public sector, health and education expanded, crowding out other service sector employment. As the town started the period in 1951 with a bloated service sector, there was little room for growth. Yet the situation has reversed and the category *Distribution, Hotels and Catering, Repairs* is below the national average (Graph M). Therefore I have discovered the converse of my prediction to correspond

⁶⁴ This is similar to Britain's long term experience of deindustrialisation. Britain was able to compete with the United States despite superior US capital and mass production techniques by using intensively skilled factory floor labour and taking advantage of low domestic wages (Broadberry, 1997). As the first industrialising country, Britain industries inevitably found themselves competing with industries in late industrialising countries, thus in possession of more modern capital and techniques. So long as British industries were able to match productivity gains through macro-inventions occurring abroad with micro-inventions making better use of old technology and capital at home, they could continue to compete. When an industry failed to do so, as became the case for ship-building and cotton textiles, it would be all but wiped out. Broadberry, SN, *The Productivity Race*, Cambridge, 1997 p.5)

with reality.

It is the case that ethnic minorities (as opposed to immigrants) are more likely to work in the service sector (more likely than not in less skilled roles, see Graph O and Graph P) and so might have contributed to structural change through providing the kind of adaptable labour force entrepreneurs desire. However, it is beyond the scope of this paper to estimate the causes for the stagnation of Bedford's service sector.

Since Bedford's *Banking, Finance, Insurance, Business Services and Leasing* sector oscillates around the national average for the whole 1951-2001 period, I do not believe it is of particular importance to this study despite it being an important growth sector in the economy as a whole. The same applies to *Transport, Storage and Communication*, although this does not appear to have been a growth sector in the national economy, other than in the 1991-2001 period.

The *Construction* sector, on the other hand, is more interesting. Despite Bedford being a town with a rapidly growing population, its construction sector was smaller than the national average throughout the 1951-2001 period. The only period in which it grew significantly was between 1971 and 1981, from 4.9% to 6.4% of Bedford's workforce, an increase of 32%. It also grew relative to the country as a whole between 1991 and 2001, though contracting in absolute terms. I suspect the size of the construction industry in Bedford varies with income growth in the town as well as the macro-economic climate in the UK, which determines the level of real interest rates. Unfortunately, it does not appear possible to link this unambiguously with population growth.

During the 1950s, 60s, 70s and 1990s the town's *Government Administration, Health and Education* sectors, which are controlled by political priorities rather than economic imperatives, prospered, growing at a rate faster than the national average. This is probably to do with Bedford's status as a county town, but of course that was not something which varied in the past half century. It is very likely that the failure of the *Distribution* sector to grow in the proportion of the aggregate workforce is due to the growth of the Government sector. For Great Britain, 1971-1981 was a period of rapid growth in *Distribution*, but stagnation in the *Government* sector. For Bedford, on the other hand, there was rapid growth in the *Government* sector, whilst *Distribution* stagnated. I believe this competition is the most likely cause for the failure of *Distribution* to expand its workforce in Bedford, and conclude overall there is no reason to believe immigration has had any significant effect in this area.

6.3. Prediction 3

As expected, Graph Q shows that unemployment in Bedford is lower than the national average throughout the 1961-2001 period. However, it also shows that unemployment in Bedford rose faster during the 1971-1981 period than was the case in Britain and grew whilst unemployment in Britain fell between 1981 and 1991. For all the speculation about the entrepreneurial nature of immigrants Bedford was not saved from rising unemployment during the process of deindustrialisation. This relates to the failure of my second prediction – immigrants are no more

enterprising than natives.

By 2001 Bedford's rate of unemployment correlated closely with its number of commuters (see Graph S), and with the size of its manufacturing sector in 1951 (Graph T). I reason that by 2001, these constitute the dominant influences upon unemployment in Bedford, rather than immigration.

In my comparison of Bedford with other towns, Brighton and Hove were the same distance from London, demonstrated a higher proportion of their population commuting to London, and had lower immigration and fewer ethnic minorities, but higher unemployment in 2001. Even though immigrants are more likely to be unemployed, it is unlikely they are a major cause of greater unemployment in their locality.

6.4. Prediction 4

Information on unemployment amongst immigrant groups is unfortunately not available in Censuses. My findings have indicated that amongst most ethnic minority groups, unemployment is higher than amongst white Britons. As shown in Graph Z, this is not due to a lack of skills: ethnic minorities are more likely to be unemployed while in possession of the same level of educational achievement as the majority white Britons, suggesting that institutional factors contribute to unemployment.

My results suggest that the cause of higher unemployment amongst non-white minorities may be a mixture of structural rigidities and racism because amongst them, the ratio of unemployed to the number without educational qualifications is greater than that of white British. It would seem that some ethnic groups have socio-cultural endowments that give them greater abilities to find work than others, be they pre-existing social networks that serve as social capital, or the greater cultural value of employment, (or stigma of unemployment) pressurising individuals to accept any form of work to avoid falling on benefits. However, it is also the case that for a given level of skills, each broad ethnic group has its own ratio of unskilled persons to unemployed, suggesting unemployment is better correlated to ethnicity than culture. Education may be related to culture, but it cannot ensure jobs for individuals.

6.5. Prediction 5

Income growth in Bedford closely reflects the national average. This confirms my prudent predictions that any influence immigrants from the 1950s to the 1970s had in lowering wages would be lost by the 1990s. Inland Revenue does not provide income figures for counties for before 1988. The behaviour of wages during deindustrialisation in Bedford is a key area for future studies to investigate.

7. Conclusion

I have found that the effects of immigration on Bedford's economy have been complex and diverse, allowing no simple positive or negative answers to my hypotheses. My results indicate that deindustrialisation was postponed by a decade due to the dampening effect of immigration

upon wages.⁶⁵ London Brick prospered until the 1970s on the basis of cheap immigrant labour which enabled the company to avoid investment in new technology. Whilst unemployment in Bedford was constantly lower than the national average, geography rather than immigration takes the credit.

The main influences on unemployment are clearly the number of commuters to London and the size of Bedford's manufacturing sector prior to de-industrialisation. Most unemployment in Bedford today is structural and demand deficient by nature, reflecting how old industrial towns have not attracted sufficient new service industries to compensate for the loss of factories, especially during the 1980s. Those towns closest to London have an advantage in this respect with the spending power of their commuters. Bedford's two largest employers, London Brick Company (Hanson) and Allen Engineering, together employed 6,000 in 1950. The loss of nearly all those jobs was a severe blow to the economy of the town, cushioned by the spending power of the immigrants who made Queens Park the ethnic ghetto of Bedford.

It appears that in Bedford amongst non-whites, the ratio of unemployment to the number of persons without educational qualifications is higher than amongst white Britons. This might be due to factors such as immigrants' weaker social networks, poorer access to valuable educational and medical services or racism in the workplace. A prime area for future studies would be in comparing separately unemployment of immigrants and ethnic minorities born in the UK, to determine what influences in this area are cultural and which are the responsibility of racism in society.

Despite the popularity of talking about a new North-South divide in Britain today, I have found that the past twenty years have been a period of economic convergence between Bedford and the country as a whole, at least with reference to employment by industrial and occupational categories. It may be the case that the North and the South of England now possess the same industries with the same occupational structures with completely different levels of wages, as long as labour productivity is proportionately higher, but this seems unlikely. This comparison of wages with industrial and employment structures, and with different levels of immigration involving different ethnic groups has the potential to occupy researchers for many years to come.

At this stage, my reader must have one subject burning in his mind - whatever happened to the brickworks, the supreme catalyst for this migration? The management of the Stewartby brickworks, now owned by Hanson Building Products, claims the plant at Stewartby is still the biggest in the world, both in terms of numbers of employees (about 250), the size of the site, and numbers of bricks produced. Today, Hanson Building Products is the second largest brick producer in the UK. The previous owners of Stewartby, London Brick Company, lost 50% of its market share during the 1970s due to changes in the type of brick consumers demanded, such as

⁶⁵ Delaying the process of deindustrialisation for the entire country by abolishing all immigration controls is unlikely to be a well-received measure with the general public should it be suggested by politicians, as the public tend to prefer their incomes high rather than fixed at world levels for the sake of industrial patriotism.

cheaper and lighter concrete blocks, and the company's failure to keep up with competitive technology. Therefore, despite its ability to recruit cheap supplies of labour from abroad, London Brick Company was unable to hold its leadership of the industry.⁶⁶ In the coming years, the company intends to recruit new employees from Poland. They are to work in Hanson's pre-cast division, where the labour is particularly "heavy and dirty", once again to do "the work the British don't want to do".⁶⁷ But the role of Stewartby in bringing immigrants to Bedfordshire will not continue indefinitely, as the Stewartby plant is to close down in a decade's time, unable to comply with pollution laws.

⁶⁶ After speaking to personnel directors of Britain's four largest brick producers, I discovered that Hanson's is the only one among them to have a history of recruiting workers from overseas. 'Ibstock', the largest, with 24 factories around the country and a turn over of £170,845,000 in 2002, claims to keep no records of its workforces' ethnicity and asserts the company has never had an overseas recruitment policy. 'Hanson Building Materials', with a turnover of £139,256,000 in 2002 and 14 UK factories, several of which pursued mass foreign recruitment programmes since the Second World War, estimates that 60% of its workforce in Stewartby is from an ethnic minority background, primarily Pakistani. The third largest, 'The Brick Business', with 11 factories and a turnover of £64,993,000 [April 02-March 03], estimates that 5% of its employees are from an ethnic minority background, concentrated in its factories in the South of England, where most of Britain's ethnic minorities live. The fourth largest, 'Baggeridge', has a turnover of £53,079,000 million [Oct 02-Sept 03] and operates with 5 factories, mainly in the North of England. Its personnel director informed me that they do not keep records of the workforce's ethnicity, but believes few come from a non-white background. She is aware of precisely 3 employees from ethnic minority backgrounds, one of whom was herself, whilst the other two were non UK nationals provide specialist scientific services to the company, rather than manual labour. [Source for turnover figures: Companies House]

⁶⁷ Daniels, M., Interview. Significant in the decision in favour of Poland rather than New Commonwealth countries was, to quote Daniels, the fact that Poles are white and that Bedfordshire's experience of immigration indicates that they integrate into British society more easily.

8. Bibliography

8.1. Primary Sources

The Bedford Study: Employment, Bedfordshire County Planning Officer, 1966.

The Bedford Study: Industrial Survey, Bedfordshire County Planning Officer, 1966

The Bedford Study: Population, Bedfordshire County Planning Officer, 1966,

Census 1951, England and Wales, General Register Office

Census 1961, England and Wales, London: Her Majesty's Stationery Officer, General Register Office

Census 1971, GB Economic Activity County Leaflet, Bedfordshire, Office of Population Censuses and Surveys, London: Her Majesty's Stationery Officer

Census 1981, Great Britain, The office of population Censuses and surveys, Government Statistical Service

Census 1991, Deprivation in Bedfordshire, Bedfordshire County Council Planning Department

Census 1991, Great Britain, The office of population Censuses and surveys, Government Statistical Service

Census 1991, Ethnic Groups, Key Statistics for Bedfordshire, Bedfordshire County Council Planning Department

Census 2001, England and Wales, Office of National Statistics

Sample Census 1966, England and Wales Economic Activity County Leaflet, Bedfordshire, London: Her Majesty's Stationery Officer, General Register Office

8.2. Primary oral sources

Interviews with Personnel Management of Brick Manufacturing Companies:

Elaine Bailey from Personnel Department of *The Brick Business*

Ann Large from Personnel Department of *Ibstock*

Melanie Ross from Personnel Department of *Baggeridge*

Mick Daniels, Industrial Relations Manager of *Hanson Building Products*. Interview on

23.04.2004 at the Stewartby Head Office.

8.3. Secondary Sources

Baines, D. *Immigration Policy in a Country of Emigration, Britain in the Twentieth Century*, unpublished paper, London School of Economics, 2004

Bedfordshire County Council, *Ethnic Minority Business Study*, 1991

Bedfordshire County Council, *Inner Bedford Labour Market Survey*, 1991

Broadberry, S.N., *The Productivity Race: British Manufacturing in International Perspective, 1850-1990*, (Cambridge University Press, 1997): pp.451 + xxv.

Brown, J., *The Un-Melting Pot: an English town and its immigrants*, London, (Macmillan and Co., 1970).

Bulusu, L., *A Review of Migration Data Source*, OPCS Occasional Paper 39, OPCS (London, 1991).

Cohen, R., (ed.), *The Cambridge Survey of World Migration*, (Cambridge University Press, 1995).

Cox, C., *Survey of Bedfordshire: Brickmaking - A History and Gazetteer Conservation Section, Planning Department*, (Bedfordshire County Council, Royal Commission on Historical Monuments, 1979).

Dintenfass, M., *The Decline of Industrial Britain 1870-1980*, (London and New York: Routledge, 1992).

Goodhart, D., "Too Diverse: Is Britain becoming too diverse to sustain the mutual obligations behind a good society and the welfare state?" *Prospect*, February 2004
http://www.prospect-magazine.co.uk/start.asp?P_Article=12394

Haigh, D., "A short account of the difficulties which London Brick encountered in its efforts to obtain and maintain an adequate supply of labour after the Second World War", (held at Peterborough Central Library, 1971).

Hillier, R., *Clay that Burns: A History of the Fletton Brick Industry*, London Brick Company Limited, London Brick House, Heffers Printers Limited, Cambridge, (1981).

Holmes, C., *John Bull's Island: Immigration and British Society, 1871-1971*, (Macmillan Press,

1988).

Jordan-Bychkov, T.G., and Domosh, M., *The Human Mosaic: A Thematic Introduction to Cultural Geography* (New York, Longman, 1999)

Karin, M., *Immigration: Economic Effects and Political Participation – An Overview and Assessment of the Literature* CSGR, University of Warwick and Department of Economics, (University of Linz, 2003).

Semeraro, C., *Legacies UK histories: Immigration and Emigration, Bedford's Italian Question*
http://www.bbc.co.uk/legacies/immig_emig/england/beds_herts_bucks/

Semeraro, C., *Legacies UK Histories: Work. Brickmaking in Bedfordshire*
http://www.bbc.co.uk/legacies/work/england/beds_herts_bucks/article_1.shtml

Lewis, W.A., “Economic Development with Unlimited Supplies of Labour” *Manchester School*, 22 (May 1954): 139-91.

Olson, M., *The Rise and Decline of Nations*, (Yale University Press, 1982).

Picket, J.M., *A Study of the Characteristics of the Workforce at the Peterborough Brickworks of the London Brick Company*, Leicester University unpublished thesis 1986 – held by Hanson at Stewartby.

Ravenstein, E.G., “The Laws of Migration”, *Journal of the Statistical Society of London*, Vol. 48, No. 2. (June 1885), pp. 167-235

Sarre, P., Philips, D., and Skellington, R., *Ethnic Minority Housing: Explanations and Policies* (Research in Ethnic Relations), (Avebury, 1989).