



Centre on Migration, Policy and Society

**Working Paper No. 81,
University of Oxford, 2010**

**Labor Shortages and US
Immigration Reform:
Promises and Perils of an
Independent Commission**

Philip Martin and Martin Ruhs

WP-10-81

COMPAS does not have a centre view and does not aim to present one. The views expressed in this document are only those of its independent author

Abstract

Comprehensive US immigration reform proposals have three major elements: improved border and workplace controls, dealing with the 11 million unauthorized foreigners in the US, and managing “future flows” of foreign workers requested by US employers. Improved controls and dealing with unauthorized foreigners were discussed extensively in the US Senate in 2006 and 2007. Future flows were not. This article reviews the decisions governments face when employers request migrant workers, Britain’s independent Migration Advisory Committee, and the promises and perils of a similar US commission to manage labor migration. We conclude that a US commission could help to clarify the trade offs involved in migrant labor policy, but cannot replace the need for inherently political choices between competing policy objectives.

Keywords

Immigration reform, labor shortages, Migration Advisory Committee, USA, UK

Authors

Philip Martin is an economist at UC-Davis and author of *Importing Poverty? Immigration and the Changing Face of Rural America*, Yale University Press, 2009.

plmartin@ucdavis.edu

Martin Ruhs is an economist at the Centre on Migration, Policy and Society (COMPAS) at Oxford University and a member of the UK’s Migration Advisory Committee (MAC); this paper does not necessarily reflect the views of the MAC. Ruhs is the co-editor (with Bridget Anderson) of *Who Needs Migrant Workers? Labor Shortages, Immigration and Public Policy*, Oxford University Press, 2010.

martin.ruhs@compas.ox.ac.uk

US immigration reform: Managing 'future flows'

In April 2010 Arizona enacted a law (SBI070) making it a crime for unauthorized foreigners to be in the state. President Barack Obama said SBI070 was "a misdirected expression of frustration over our broken immigration system," but added "I don't have 60 votes in the Senate" to enact comprehensive immigration reform."¹ In late July 2010, a federal judge blocked the implementation of Arizona's law just before it was to take effect because of a "a substantial likelihood that [Arizona law enforcement] officers will wrongfully arrest legal resident aliens" if SB 1070 is implemented, imposing "a 'distinct, unusual and extraordinary' burden on legal resident aliens that only the federal government has the authority to impose."²

The controversy over the Arizona law renewed the US debate over immigration. There is agreement that comprehensive immigration reform must deal with three elements: border and workplace controls, the 11 million unauthorized foreigners in the US, and the "future flow" of foreign workers requested by employers. The first two elements were debated extensively in the Senate in 2006 and 2007, but there was much less discussion of how to respond to employers seeking temporary migrant or guest workers.³ One reason the Senate failed to approve the Comprehensive Immigration Reform Act (CIRA) in 2007 is because some Republicans thought that CIRA did not make it sufficiently easy for US employers to hire foreign workers, while some Democrats feared that CIRA made it too easy for employers to get access to foreign labor.

Opening the US labor market to more guest workers is one of the toughest migration issues facing Congress. The most challenging questions include how many foreign workers should be admitted and what criteria employers should have to satisfy before they receive permission to hire migrant workers. The US government currently uses an easy attestation procedure for employers seeking college-educated foreigners to fill jobs that require a college

¹ Quoted in Migration News. 2010. Arizona, Polls, REPAIR. Vol. 17. No 3. http://migration.ucdavis.edu/mn/more.php?id=3612_0_2_0

² Quoted in Migration News. 2010. Arizona, Obama, Legalization. Vol. 17. No 4. <http://migration.ucdavis.edu/mn>

³ Ray Marshall, Secretary of Labor under President Carter, in April 2009 proposed a Foreign Worker Adjustment Commission to determine whether there are labor shortages that need to be filled with guest workers or immigrants (Marshall, 2009). Marshall's plan for comprehensive immigration reform was endorsed by the two major US federations of unions, the AFL-CIO and Change to Win. Papademetriou et al. (2009) proposed renewable three-year provisional visas for foreign workers that would tie them to employer who sponsored them for their first year in the US, after which they could change US employers. MPI proposed that Congress determine the number of provisional visas and the criteria for renewal and adjustment to immigrant status.

degree under the H-1B program, which is one reason the regular 65,000 H-1B visas are often requested as soon as they become available.⁴ The certification procedure for employers seeking low-skilled foreigners to fill seasonal farm jobs includes more steps to protect US workers, one reason why the number of H-2A visas is not capped.

Opinion polls suggest that most Americans, and majorities in other industrial democracies, want immigration reduced, including guest worker admissions (Transatlantic Trends, 2009).⁵ The Labour government elected in Britain in 1997 greatly increased the admission of migrant workers, but reformed its migrant worker system a decade later as public opinion turned against the rapid growth in immigration. A key mechanism introduced by the British reform was an independent Migration Advisory Committee (MAC) charged with determining if labor shortages exist in occupations for which employers request migrants and whether admitting migrants is a sensible response.

Senate Democrats in April 2010 released an outline for comprehensive immigration reform, Real Enforcement with Practical Answers for Immigration Reform (REPAIR), which includes a new US commission to assess the need for migrant workers. The Commission on Employment-Based Immigration would study "America's employment-based immigration system to recommend policies that promote economic growth and competitiveness while minimizing job displacement, wage depression and unauthorized employment."⁶ REPAIR does not include a new guest worker program, prompting Senator John McCain (R-AZ), once a leading supporter of comprehensive immigration reform, to assert: "We don't need a commission. I can't support any proposal that doesn't have a [new] temporary worker program."

This article examines the key challenges facing governments when employers request migrant workers. We review the British experience with the MAC since 2008 and assess the promises and perils of a similar commission in the US. We conclude that a commission could provide help to Congress to enact comprehensive immigration reform, but can not and should not replace Congressional decisions that weigh the trade offs involved in decisions to admit migrant workers.

⁴ Another 20,000 H-1B visas are available for foreigners who earned advanced degrees in the US, and an unlimited number are available to universities and nonprofits seeking college-educated foreigners to fill US jobs that normally require a college degree.

⁵ For example, a May 2010 WSJ/NBC poll found that two-thirds of US adults supported SB 1070, even though almost two-thirds agreed that it would lead to discrimination against legal Hispanic immigrants.

⁶ The Real Enforcement with Practical Answers for Immigration Reform (REPAIR) proposal is available at: media.washingtonpost.com/wp-srv/politics/.../REPAIRProposal.pdf

Employer-Led Migration Policy

Governments face several key decisions when designing guest worker programs. These include how many migrants to admit, how to select migrants, what rights and privileges to grant them after admission, and whether to allow migrants to change employers and become permanent residents or require them to return home after a period of employment.

One answer to questions about how many and what type of temporary migrant workers should be admitted is to take a ‘trust-the employer’ approach. Such an employer-led policy usually allows employers to hire migrants after meeting two basic requirements—offering a bona fide job and testing the labor market to ensure that “local workers”⁷ are not available to fill it.

Labor market tests usually involve a government agency *certifying* that an employer tried and failed to find local workers. The agency typically monitors employer recruitment efforts by requiring that job vacancies be posted on local employment exchanges and checking on the outcomes of employer interviews with local workers who respond. Failed recruitment efforts are “rewarded” with a certification that the employer can fill the job with the desired guest worker, who is generally identified before the employer began the fruitless search for local workers.

Certification becomes contentious when local workers respond to employer recruitment efforts but are not hired. If rejected local workers complain that the employer unlawfully preferred migrants, government agencies are not well equipped to determine whether the local worker or the migrant is better qualified to fill a particular job. For example, recruiter Global Horizons was found by the US Department of Labor to have rejected qualified US workers to fill apple picking jobs because Global preferred Thai guest workers. Mordechai Orian, the president of Global Horizons, testified during a July 2007 trial that Thais were preferred because “they work really hard” and were less likely to abscond or leave their employers than local workers, who might change jobs to earn higher wages. The Thais had each paid \$10,000 to \$17,000 each to obtain US work visas and were loyal to Global because getting fired meant being removed from the US.⁸

The alternative to certification is *attestation*, a procedure that allows employers to attest or assert that they offered at least the prevailing occupational wage and, in some cases, have

⁷ In the US, “local workers” are US citizens and other legally authorized workers.

⁸ See H-2A, H-2B, Global. 2007. Rural Migration News. Volume 13 Number 4. October. http://migration.ucdavis.edu/rmn/comments.php?id=1249_0_4_0, Global was charged with human trafficking in September 2010 even though all of Global’s workers were admitted legally with H-2A visas.

sought and failed to find local workers. US attestation policies do not involve labor market tests. Instead, employers can recruit foreign workers simply by asserting that they are offering prevailing wages, and government agencies wait for complaints made by foreign or local workers to trigger inspections. Attestation makes it relatively easy for employers to obtain foreign workers but, to provide some protections for local workers, there is often a cap on the number of work visas available.

The US H-1B program is an example of an attestation program. H-1B visas are available to foreign workers with at least a BA degree who are requested by US employers to fill jobs that normally require such degrees. When the H-1B program was created in 1990, a compromise gave employers easy access to foreign university graduates in exchange for an annual cap of 65,000 visas a year, almost three times annual admissions at the time. A combination of the IT-boom in the 1990s and the development of a migration infrastructure to move Indian and other guest workers into US jobs pushed employer requests above 65,000 a year in the late 1990s, and prompted successful employer efforts to raise the cap and create exemptions from it.⁹ Today, the cap is 65,000 a year, plus 20,000 H-1B visas for foreigners with advanced degrees from US universities and an unlimited number for those employed in non-profit institutions such as universities.¹⁰

Under the H-1B program, employer attestations are submitted via the internet, and over 99 percent are approved in seconds. Enforcement normally awaits complaints about employer violations, and complaints are rare because foreigners whose legal stay in the US depends on satisfying their employer rarely complain. Most US employers may lawfully hire H-1B visa holders even if US workers are available, and some do (Hira 2009).

Until 2008, Britain had a similar trust-the-employer approach to the admission of skilled non-EU workers. British employers had to submit job offers and undergo a labor market test to hire migrants, but there was no cap on how many could be admitted. The labor market test was to advertise the job for two weeks (one week if the salary exceeded £40,000) and, if local

⁹ The American Competitiveness and Work Force Improvement Act of 1998 raised the cap on H-1B visas from 65,000 a year to 115,000 in 1999 and 2000 and 107,500 in 2001, imposed a \$500 per H-1B visa training fee on employers to generate funds to train US workers to fill the rising number IT jobs, and required H-1B-dependent employers and willful violators of H-1B regulations to attempt to recruit US workers and not lay off US workers in order to hire H-1B foreigners.

¹⁰ Congress again raised the cap on H-1B visas to 195,000 a year for FY01, FY02, and FY03 in the American Competitiveness in the Twenty-First Century Act of 2000. (The cap reverted to 65,000 a year in FY04.) The employer-paid training fee was raised to \$1,000 per H-1B visa, and H-1B visas issued to foreigners employed by US universities and research institutions were exempted from the cap.

workers were unavailable,¹¹ the employer received permission to hire the migrant worker. Amidst rapid economic growth, there was little oversight of employer recruitment efforts, and the number of work permits tripled from less than 30,000 in 1995 to almost 90,000 in 2007 (Migration Advisory Committee 2008a).

The rising number of work permits for non-EU migrants, plus workers from Eastern Europe who arrived after EU enlargement in May 2004, contributed to a rapid rise in overall immigration, from 330,000 a year in the early 1990s to 574,000 in 2007; net migration rose from 44,000 to 233,000 during this period (Migration Advisory Committee 2009a). Rising migration triggered a heated debate about the impact of migration on UK population growth even before the onset of the global economic downturn. If net migration remained at 2008 levels, Britain's population was projected to increase from the current 61 million to over 70 million by 2029 (Office for National Statistics 2009).

Special or National Interests

Employer-led migrant worker policies often become special interest policies that give significant influence to recruitment agencies and the "migration industry." Employers, migrants and intermediaries clearly benefit from increased migration, but the admission of more migrant workers may not always be in the best interest of the economy and society as a whole. To make immigration policy sustainable, labor immigration policies need to be based on the *national* interest, a term that is often hard to define but involves balancing the interests of all affected parties, including those of local workers. The national interest must also consider the wider benefits and costs of immigration, including the positive productivity spill-over effects of highly skilled migrants and any negative economic or congestion effects of migrants concentrated in particular occupations and areas.

This means that what is good for IT and financial firms such as Microsoft and Goldman Sachs may not be in the national interest. The existence of unfilled job vacancies does not, by itself, indicate that there are labor or skills shortages that would justify the admission of migrant workers. There are several reasons, including the fact that there is no universally accepted definition of a labor or skills shortage. Employers may claim there is a shortage if they cannot find local workers at *prevailing* wages and employment conditions, and most media reports of

¹¹ In the UK, 'local worker' means workers from within the European Economic Area (EEA), the 27 member states of the European Union (EU) plus Iceland, Liechtenstein and Norway.

shortages are based on surveys that ask employers to report hard-to-fill jobs at *current* wages and employment conditions.

In competitive labor markets, changes in wages can be expected to bring labor supply and demand into balance. Most labor shortages should be temporary, eliminated by rising wages that increase the supply and reduce the demand for labor. However, labor market adjustments can be slow, so government responses to unfilled vacancies often depend on the reasons for labor shortages, such as whether they are due to a sudden increase in the number of jobs or high turnover among workers who move up in an expanding labor market.

The fundamental point remains: complaints of labor shortages cannot be separated from wages and other labor market indicators. Industries and occupations reporting labor shortages should have rising relative real wages, faster-than-average employment growth, and relatively low and declining unemployment rates.

It is hard to find evidence of national labor shortages using such top-down measures. For example, Veneri (1999) looked for labor shortages in 68 occupations in the late 1990s, when US unemployment rates were low. Labor-short occupations were defined as those with employment growth at least 50 percent higher than the average for all occupations; median weekly earnings rising at least 30 percent faster than the average for all occupations; and an occupational unemployment rate at least 30 percent lower than the average for all occupations. Veneri found shortages in only seven out of the 68 occupations, and did not find shortages in information technology, among construction workers and for registered nurses, occupations that US employers claimed had significant shortages.

One limitation of top-down national wage and employment indicators is that they cannot deal with employer claims of shortages in specific areas. Bottom-up evidence from employers, workers and other stakeholders is a major feature of the British MAC's approach to dealing with labor shortage complaints. For example, the MAC in 2008 relied on bottom-up evidence to find a shortage of "project managers for property development and construction," even though top-down data did not suggest a national shortage in the broader occupation "managers in construction" (SOC 1122). Similarly, there was no top-down evidence of a shortage of "secondary education teaching professionals" (SOC 2314), but bottom-up evidence found a shortage of secondary education math and science teachers (MAC 2008a).

If there are labor shortages, is immigration a "sensible" response? Answering this question requires an assessment of the feasibility and desirability of alternatives to migrants. Employers can respond to perceived shortages by increasing wages to attract local workers who are not in the labor force, who are unemployed, or who are employed in other sectors. Second,

if local workers lack necessary skills to fill vacant jobs, employers could invest in training or change production processes to use less-skilled labor. Third, employers could remedy some labor shortages by changing to less labor-intensive production processes. Finally, some labor shortages could be dealt with by shrinking production at home and increasing imports, as with labor-intensive agriculture.

These alternatives may not be available to all employers at all times. For example, most construction, health, social care and hospitality work cannot be easily replaced by imports. In practice, employers weighing the recruitment of migrants versus other alternatives look at relative costs. Although migrants are often a cost-attractive option for employers, they may not be a “sensible” choice for the overall economy. For example, in some low-wage occupations, admitting more migrant workers may entrench low-cost production systems in high-wage economies, reducing their competitiveness over time.

Reliance on ever more migrants in response to claims of labor shortages can lead to path dependence that makes it hard to change migration policy (Ruhs and Anderson, 2010). Employers who assume that low-skilled migrants will continue to be available may make investments that will be unprofitable if the inflow is reduced, as when meatpacking plants are opened in places with many animals but few workers, or when farmers plant apple and cherry trees in remote areas. The lower labor costs due to the availability of migrants can be capitalized into asset values, distorting investment decisions in the sense that the wages acceptable to migrants, not trends in local workers’ wages and benefit costs, justify investment decisions. Once low migrant wages are capitalized into asset values, owners have an incentive to keep border gates open to migrant workers to preserve asset values, which helps to explain the keen interest of US farmers in migration policies.

How can governments assess the feasibility and desirability of alternatives to migrants? Defining, measuring and identifying labor needs and the alternatives to migrants is complex. Australia, Canada and Spain have special government units or independent advisory bodies to analyze labor shortage complaints. The UK went further, establishing the Migration Advisory Committee (MAC) to advise the government if there are skilled labor shortages that can be “sensibly” remedied by migrant workers from outside the European Economic Area (EEA). The MAC was created to develop objective analyses of labor shortages and appropriate policy responses, the same goal envisaged for the US commission proposed by Senate Democrats. In three years, the MAC has changed the quality of the debate over labor and skills shortages in Britain, but its experience also highlights the inherent limitations of independent commissions in making migrant worker policy.

Britain's Migration Advisory Committee (MAC)

In 2008, Britain reformed its immigration policy for admitting migrant workers from outside the EEA, moving from a system that offered more than 80 routes of entry to a streamlined point-based system (PBS) with five tiers or entry channels. Tier 1 is for highly skilled workers without a British job offer, and is available for those with characteristics that suggest they will be successful in the UK labor market because of their education, high previous earnings, and British work experience.

Tier 2 admits skilled workers with a job offer in the UK in three major sub-channels. One admits migrants to fill jobs on a shortage occupation list, eliminating the need for the employer to test the labor market. Another channel permits the entry of migrants after employers have tested the labor market and failed to find local workers, but foreigners arriving via this sub-channel must achieve sufficient points based on education and the UK wage offered to enter. The third sub-channel is for intra-company transfers. Tier 3 is for low-skilled migrant workers and is currently closed, Tier 4 governs foreign students, and Tier 5 includes other temporary migrants who are not primarily seeking jobs, such as working holidaymakers.

There were two key rationales for reforming the UK's immigration system: the government wanted to make the system simpler and more transparent and to move from an employer-led migration model to a migration policy that maximized the benefits of migration for the entire British economy. Although employers still play an important role in the reformed system, the five-tier system introduced new selection criteria and gave the MAC an important role in dealing with labor shortage complaints.

The MAC's initial charge was to "provide independent, evidence-based advice to government on specific sectors and occupations in the labor market where shortages exist which can sensibly be filled by migration." The government has since expanded the work of the MAC, asking it to determine which jobs should be on the Tier 2 shortage occupation list (MAC 2008a; 2009b; 2010a), to recalibrate the points for Tier 1 highly-skilled migrants, to redesign the rules for Tier 2 entries, to assess the economic impacts of dependents (MAC 2009a), and whether to abolish the Worker Registration Scheme for A8 migrants (from the eight East European countries that joined the EU in 2004, MAC 2009c) and give A2 migrants (from Bulgaria and Romania who joined the EU in 2007) free access to the British labor market (MAC 2008b). In summer 2010, the MAC was asked to recommend how many work visas should be made available for non-EU skilled workers (MAC 2010b).

The MAC is usually given three to six months to respond to the government's migration questions with a public report that includes recommendations. The fact that the MAC's advice is public makes it harder for the government to reject MAC recommendations without good reason or further evidence. Most, but not all, of the MAC's recommendations have been adopted by the British government.

The MAC has had three major impacts on British debates about labor shortages and immigration policy. First, the MAC has earned a reputation for transparent analysis of the data and evidence relied upon to reach its recommendations, helping to win them wide acceptance. There are many stakeholders who disagree with some of the MAC's recommendations, but the MAC's use of both top-down indicators and bottom-up evidence, such as submissions from employers, unions, and government departments, has bolstered its reputation and provided flexibility. Bottom-up evidence allows employers and other stakeholders to have a voice in MAC analysis.

Second, even if the MAC finds that there is a labor shortage, it can decide not to recommend the admission of migrant workers. Requiring the MAC to weigh top-down and bottom-up evidence of labor needs before deciding whether admitting migrant workers is a sensible solution helps to make clear that the mere existence of a labor shortage does not automatically open the door to migrant workers.

Even when the MAC recommends the inclusion of a particular occupation on the shortage list, it can point out that migration may not be a sensible long-term response to shortages. For example, two thirds of the care assistants in London are migrants. The MAC's analysis found that shortages of care givers were often due to low wages. Most social care is publicly funded by local governments but provided by the employees of private businesses and voluntary organisations, and constraints on local authorities' budgets keep wages low. As a result, care operators tend to hire flexible migrants willing to accept prevailing wages. Simply training more British workers is unlikely to provide more British care workers because local workers with required training can earn more elsewhere.¹²

Third, the MAC highlighted the link between training and immigration to foster more cooperation between government departments. In late 2008, then Prime Minister Gordon Brown announced that if an occupation was put on the labor shortage list, making it easier for

¹² The MAC's analysis concluded that care "budgets need to be larger, or at least better targeted towards those parts of the sector suffering from labour shortage, so that those workers can be paid more." It recommended that only the highest skilled care workers be added to the shortage occupation list to avoid "institutionalising low pay in the care sector" (MAC 2009b, p.96).

British employers to recruit non-EU workers to fill vacant jobs, the government would review whether and how more training of British workers could reduce the need for migrants, highlighting the links between shortages, migration, and training.

A key limitation of the MAC is that it can deal only with questions submitted to it by the government; it cannot independently conduct analyses and make recommendations on other issues. For example, British governments and stakeholders have discussed caps on non-EU migration for the past several years, but the MAC dealt with the question of caps only after being asked to do so by the Conservative-Liberal Democrat government elected in May 2010. The MAC's analysis emphasized that only 20 percent of non-EU migration in recent years is employment related, so that the government can achieve its goal of reducing net migration to "tens of thousands" only by reducing non-EU student and family migration.¹³

The MAC has helped to define and refine controversial migration policy issues and the options to deal with them. Until recently, the MAC dealt only with the economic aspects of migration. The then-Labour Government in 2008 established a separate Migration Impacts Forum (MIF) to examine the social effects of migration, but it received little support, prompting criticism that the government was considering only economic issues in making migration policy. The current Conservative-Liberal Democrat government asked the MAC to consider economic as well as social impacts of migration when making recommendations to the government.

Conclusion: Promises and Limitations of an Independent US Commission

Regulating the entry and right to work of migrants is a key function of governments. However, it is often hard for government agencies to assess and respond to employer requests for foreign workers to fill alleged labor and skills shortages because of the complexity of measuring shortages and evaluating alternative options to deal with them. The cost of bad policy decisions can be very high, leaving local workers without jobs and delaying productivity-increasing changes that keep economies competitive. On the other hand, restricting access to foreign workers could adversely affect particular employers and may slow economic growth.

Managing future flows of migrant workers is one of the three key elements of US immigration reform proposals. The bills considered by the Senate in 2006 and 2007 would have followed current policy by stipulating the number of work visas in law and setting out the

¹³ The MAC recommended that work-related migration takes 20 percent - and student and family migration together take 80 percent - of the total cut in non-EU immigration required to reduce overall net-migration to under 100,000 by 2015 (MAC, 2010b).

procedures to be followed by employers seeking migrant workers. However, the April 2010 Senate Democrats' proposal copies the UK approach by calling for a MAC-like independent commission to make recommendations on when and how many migrants to admit.

The experience of the British MAC suggests that a US commission could make several key contributions. First, it could help to de-politicize the debate on labor needs by allowing data and evidence to replace assertions about the need for migrant workers. Careful consideration and analysis of both top-down labor market indicators and bottom-up evidence from employers, unions, and other stakeholders can raise the quality of the debate over the need for foreign workers. Second, an independent commission can help to clarify the various measures of shortages and outline sensible responses when shortages are found. Third, a commission can make the trade-offs that underlie competing policy objectives clearer, such as that between protecting local workers and giving employers easy access to foreign workers.

It is equally important to be clear about the limitations of a commission. Immigration policy ultimately requires a balancing of competing interests. The MAC has shown that there is no single answer as to whether or not migrants are needed to fill vacant jobs. Deciding whether the optimal response should be additional migrants, higher wages, or some other option is an inherently political decision. An independent commission can make the trade-offs between policy options and their consequences clearer, which is a very important contribution. However, it can not and should not replace an explicit political debate about competing policy objectives and trade offs. An independent commission can provide the data and evidence to improve migration decision-making, but it cannot resolve political decisions about whose interest should have higher priority.

Bibliography

- Hira, Ron. 2009. H-1B Visas: It's Time for an Overhaul. Business Week. April 13.
- Marshall, Ray. 2009. Immigration for Shared Prosperity — A Framework for Comprehensive Reform. May. www.epi.org/publications/entry/book_isp
- Migration Advisory Committee (MAC). 2008a. First recommended shortage occupation lists for the UK and Scotland. Migration Advisory Committee, www.ukba.homeoffice.gov.uk/sitecontent/documents/aboutus/workingwithus/mac/first-lists/
- Migration Advisory Committee (MAC). 2008b. The labor market impact of relaxing restrictions on employment of A2 nationals. Migration Advisory Committee. www.ukba.homeoffice.gov.uk/sitecontent/documents/aboutus/workingwithus/mac/a2-report/
- Migration Advisory Committee (MAC). 2009a. Analysis of Tier 1, Tier 2 and dependants under the points-based system. Migration Advisory Committee
- Migration Advisory Committee (MAC). 2009b. First review of recommended shortage occupation lists for the UK and Scotland. Migration Advisory Committee
- Migration Advisory Committee (MAC). 2009c. Review of transitional measures for A8 nationals. Migration Advisory Committee.
- Migration Advisory Committee (MAC). 2010a. Third review of recommended shortage occupation lists for the UK and Scotland. Migration Advisory Committee
- Migration Advisory Committee (MAC). 2010b. Limits on Migration. Migration Advisory Committee. November.
- Office for National Statistics. 2009. National population projections, 2008-based. October 21
- Papademetriou, Demetrios, Doris Meissner, Marc Rosenblum, and Madeleine Sumption. 2009. Aligning Temporary Immigration Visas with US Labor Market Needs: The Case for Provisional Visas. Migration Policy Institute. www.migrationpolicy.org
- Ruhs, Martin and Bridget Anderson. Eds. 2010. Who Needs Migrant Workers? Labor Shortages, Immigration and Public Policy. Oxford University Press
- Transatlantic Trends. 2009. Immigration. http://www.gmfus.org/trends/immigration/doc/TTI_2009_Key.pdf
- Veneri, Carolyn. 1999. Can Occupational Labor Shortages be Identified using Available Data? Monthly Labor Review. Vol 122 (3), 15-21