Evidence-based regulation of labour migration in OECD countries: setting quotas, selection criteria, and shortage lists

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Abstract
The growing complexity of selection criteria for discretionary labour migration in OECD countries has been accompanied by an expanded demand for labour market analysis and consultation with stakeholders. While some features of general or detailed criteria may be fixed in legislation, numerical quotas or targets, shortage lists, and multiple-criteria points-based systems are generally subject to periodic review and revision based on labour market data and consultation with stakeholders. Official government bodies have maintained coordination of this process, with varying degrees of externalization. In most countries expertise is internal, with recourse to external mandated bodies rare. In almost all cases, however, the process is designed to promote consensus around the policy while maintaining political control.

Keywords: Labour migration, migration legislation, policy making.

Introduction
A basic objective of labour migration policy is meeting labour needs that cannot be met efficiently with domestic labour within a reasonable timeframe while avoiding adverse effects on the labour market for residents (OECD, 2009). This means deciding who to admit and how many to admit, and for what jobs. The definition of “efficiently” and “reasonable timeframe” are not absolute, and adverse effects – or the lack of adverse effects - are more often assumed than observed. Policy mechanisms have nonetheless concentrated on regulating migration according to these general objectives, and to an increasing extent, have allocated a role to expertise – research and analysis – in calibrating the tools used to achieve these objectives.

This article examines the mechanisms for adjusting policy levers within migration systems in OECD countries. Labour migration policies in OECD countries vary widely across countries and over time, but one area of convergence has been the use of mechanisms to manage entries. In addition to general numerical caps, quotas and targets, there is a tendency to focus on specific occupations and to use points-based selection systems to select migrants. Settlement countries such as Australia, Canada and New Zealand, which have long promoted application for admission from candidates worldwide, have

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tweaked elements of existing systems, and many other OECD countries have implemented economic migration systems, although selection criteria vary.

Research and analysis serve a role in the political economy of labour migration policy, with expertise – internal or external, bureaucratic or academic – used to guide policy choices. Expertise feeds what Boswell (2009) calls “technocratic modes of justification”, the use of knowledge for persuasion or arbitration, rather than “democratic or power-based” models of decision-making. However, expertise may also involve mechanisms for consultation that allow interest groups and other actors to reach consensus.

Individual labour market tests provide a case-by-case evaluation of whether it is possible to fill jobs with local workers. Shortage occupation lists may supersede individual labour market tests, for efficiency gains or to encourage applicants, or may constitute one of the criteria for admission. Regional differences in labour markets may be taken into account. Broad numerical caps provide defined limits for labour migration, while educational and salary thresholds are used to restrict migration to skilled workers whose productivity effects are assumed to be positive.

Finally, multiple criteria may be imposed, and applicants ranked or selected according to weighted criteria in a points-based system. Multiple selection criteria have been employed in points-based systems in the so-called settlement countries (Canada, Australia, New Zealand) for decades, and have appeared in European OECD countries and in Japan more recently (OECD, 2011).¹

All these policy levers require definitions: numerical limits or objectives, what salary and education thresholds, which occupations to include on shortage lists, definitions of labour market tests, and so on. Legislation often enshrines specific criteria, imposing a rigidity on selection. Yet across OECD countries, more governmental, tripartite or even external expert bodies are setting and periodically reviewing admission criteria in order to achieve the objectives which have been identified at the political level.

For expert knowledge to serve this function, it must be plausibly scientific and evidence-based. The choice of evidence may not be an obvious exercise, and may be constrained by institutional factors and by the availability of data. This paper identifies some of the institutional arrangements, and the evidence used, in implementing adjustments in migration policy mechanisms.

**Targets and caps**

One of the bluntest instruments for managing migration is setting a numerical limit, which may be a target (an objective for admissions) or cap (an overall limit or ceiling on entries).

¹ For an overview of the parameters and weighting in different points-based systems, see OECD (2011) and the table here: http://dx.doi.org/10.1787/888932441971.
Targets, for example, are used in Australia, Canada, New Zealand for overall permanent migration. For settlement countries, immigration is a significant component of growth in the labour force, where it provides, overall, more than 35% of entries into the working-age population (OECD, 2012). In these countries, workers and their family members comprise more than half of migration flows. Public opinion in the three settlement countries cited above is largely favourable to selected migration, which facilitates the elaboration of targets directly by government bodies. In light of the explicit link between labour supply objectives and immigration, these countries invest in expertise within the departments responsible for administering programmes. Civil servants are assigned to implement and monitor the migration programmes, and external consultations serve to inform government decisions and build consensus. In Canada, for example, targets are developed following consultation with stakeholders and on-line questionnaires open to the public, although the final targets are the exclusive responsibility of the Ministry of Immigration and Citizenship.

Overall numerical targets of settlement countries, set by government decision and subject to annual revision, have not varied widely in recent years. Where immigration is meant to contribute more to long-term demographic development – maintaining the relative size of the working-age population, for example - than to immediate labour market demand, responses to changing economic conditions may be modest (OECD, 2009b). The categories and criteria for admission within these targets in settlement countries, however, have fluctuated in response to ongoing evaluation of the programmes. Settlement countries, in fact, have in the past two decades begun to monitor the integration of various types of migrants using data from longitudinal surveys to refine selection criteria. Major reviews in Canada and Australia led to significant changes in 2008-2010 to each country’s discretionary economic migration streams, for example (DIAC, 2008, 2010; DEEWR and DIAC, 2009; CIC, 2010). Longitudinal studies and reviews serve not only a technical function (validating criteria) but also a political function (communicating to the public the benefits of migration while providing reassurance that technocratic methods ensure that migration generates benefits) (Boswell, 2009). Caps may also be used in these countries, for example as a safeguard for introduction of new policy instruments, as in the case of Canadian allotments for PhD recipients.

Caps apply to a number of categories of permanent migration in the United States. Numerical limits are also applied to temporary, provisional and seasonal work permits in several OECD countries, including the United States,

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2 See, for example, RoyMorgan Poll 4482, March 2010, which found that 87% of Australians were in favour of skilled migration. www.roymorgan.com/news/polls/2010/4482/; for Canada, the CIC Annual Tracking Survey consistently shows public support for current levels of migration (Soroka and Roberton, 2010).

3 This was not the case in the past: until 1990, Canadian targets depended directly on economic conditions.
the United Kingdom, Norway, Korea, Portugal, Spain and Italy. 4 Caps on temporary migration are generally meant to serve as a brake on employer demand, especially (but not only) for lesser-skilled employment where resident workers may be exposed to the risk of substitution, displacement or other adverse employment effects. Since caps are a ceiling, when they are oversubscribed, employers may push to raise them.

Caps for temporary low-skilled workers are generally set each year after analysis of labour market indicators and/or consultation with employment services, social partners or other actors. In Portugal, for example, the Ministry of Labour conducts an in-house analysis of vacancies, employment trends and expected interest in international recruitment, and submits the proposed cap to the social partners. In the United Kingdom, caps are established by the government, in some cases after consultation with its Migration Advisory Committee, originally tasked exclusively with drawing up a shortage occupation list. In Korea, overall caps and industry quotas are set annually by the Foreign Workers Policy Committee,5 based on the business needs and employment conditions at home, as well as performance indicators in the temporary foreign worker programme itself. New Zealand’s Recognised Seasonal Employer programme is capped (at 8,000), as is the Australia Pilot Pacific Seasonal Worker which it in part inspired. Norway also caps its seasonal agricultural employment programme.

Numerical limits may also apply to temporary programmes for skilled workers. In Norway, for example, caps for specialists are determined based on a proposal from the Ministry of Labour, taking into account labour market conditions, and reviewed by the Ministries of Finance and Industry. Employer requests above this limit – which has never been reached - are subject to a labour market test. This kind of “safety-limit” cap was in place in Switzerland prior to its free movement agreement with the European Union (OECD, 2009).

Involvement of social partners

In a number of OECD countries, especially those where tripartite bodies traditionally play a role in policy, the social partners are actively involved in the elaboration of caps. In Italy, caps (“quotas”) are determined annually through consultations with local authorities and the employment services, but are the joint responsibility of the Ministry of Labour and the Ministry of the Interior.6

4 Quotas may also refer to apportioning of a cap according to subcategories.
5 The Policy Committee, which comprises no more than 20 members and is nominated by Presidential Decree, is chaired by the Director of the Office of the Prime Minister, comprises representatives of the Ministries of Strategy and Finance; Foreign Affairs and Trade; Justice; Knowledge and Economy; and Labour; the Small and Medium Business Administration; and other central administrative agencies.
6 Under the 1998 legislation, quotas are guided by a three-year planning document, since eliminated, drafted by the Prime Minister’s office following consultations with a wide range of central, regional and local bodies, social partners, civil society and experts. In the absence of this
The final decision is political. In Slovenia, the Economic and Social Council (a tripartite body of social partners, comprising representative of employers, trade unions and the government) proposes a quota to the Ministry of Labour, which presents it to the government.

**Other means for setting caps**

In some countries, limits are indexed to population indicators: numerical caps on temporary work permits in Austria are indexed to the total labour supply and in Estonia indexed to the population. No special measures or decrees are required, and the cap changes automatically.

Some caps are fixed in legislation (notably, the United States, for most economic categories). In other cases, caps are set largely through negotiation with industry. In Israel, where government expertise has concluded that low-skilled foreign workers negatively affect local residents, quotas persist despite strong industry pressure to raise them (OECD, 2010). Caps for low-skilled workers in the agricultural sector are based on an assessment of demand by the Ministry of Agriculture, after being revised sharply downwards by the Ministry of Industry, Trade and Labour; the cap for construction workers is established through negotiation with the construction industry (OECD, 2011c).

**Dealing with oversubscription**

In a demand-driven and capped work-permit system, when employer requests for authorisation exceed availability, some form of allocation must occur. The United States and Italy both use filing dates, although this favours employers whose labour demand occurs in a certain period of the year. In the United States, if applications for H-1B visas exceed the cap, a lottery is held; in Italy, on-line filing is opened at an exact time, and applications are handled in the order in which they were received (e.g., the first five seconds). The United Kingdom uses monthly filing periods, but ranks applicants by individual points if the monthly cap is exceeded, although this has never had to be used. Korea and Israel, which use overall caps, also allocate quotas to individual employers. In Korea, allocation is based on points (points for businesses using or requesting fewer workers, and making a greater effort to hire locally; points are subtracted for prior violations). Allocation is determined within the relevant ministry.

Caps may be undersubscribed. The United Kingdom’s Sectors Based document, which has not been approved since 2004-2006, the government is free to establish quotas or not based on prior guidelines.

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7 This may be simply arranging processing so that it keeps pace with targets, although a backlog or waiting list is generated.
8 A number of countries require employers to be pre-certified (approved) before authorizing them to hire foreign workers, which can reduce the pool of applicants on the demand side; certification requirements represent a further parameter of regulation of labour migration.
Where education requirements are in place, the method for recognition of foreign qualifications may determine ability to use a channel: if national recognition bodies must issue a certificate of equivalence, for example, it may be time consuming and expensive to acquire recognition.

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work-permit system, which sets two thresholds for work permits and “Green Cards”, and allows accompanying family and faster access to permanent residence.\textsuperscript{10}

The EU Blue Card for highly-skilled workers was introduced in a 2009 Council Directive (2009/50/EC) and has since been incorporated into national law\textsuperscript{11}. The Directive sets a salary threshold for eligibility for this permit, namely 1.5 times the average salary (as defined in each country), and offers a lower threshold (no higher than 1.2 times the average salary) for skilled occupations in shortage (also defined nationally).

Additional constraints may affect the adjustment of labour-migration mechanisms. Bilateral agreements may require regulation to favour specific countries, to establish lists of occupations for these countries (e.g., in France) or to designate quota set-asides (e.g., in Italy), often to achieve foreign policy objectives unrelated to labour migration. These constraints must be taken into account in adjusting the criteria discussed above.

**Shortage occupation lists**

The basic regulatory mechanism in most labour migration systems is the labour market test, which verifies whether a job can be filled by a local worker. This may take the form of mandatory advertising requirements – in most OECD countries – or a review of salary or other characteristics of the job itself. Shortage occupations often exempt employers from the labour market test (see OECD 2008).

Germany’s Ministry of Labour bases its skilled occupation shortage list on employment agency data, both objective indicators (vacancies and vacancy duration) and a qualitative re-examination (see OECD 2013 for details). The Ministry may cut the list of occupations on the list, and the initial list was in fact limited to four occupations.

France’s shortage lists – for employment of non-EU citizens and citizens of EU countries still subject to labour market restrictions – are established by the Ministry of Immigration based on regional vacancy and unemployment data, with the annual ratio of vacancies to job-seekers determining which occupations were on the list; the original threshold of 0.9 was relaxed to 1.0. Occupations which are considered unqualified or for which little retraining would be required are excluded (Saint-Paul, 2009). The Ministry also considers “the reality and likely continuation of the shortage,” and submits it for consultation with the social partners.\textsuperscript{12}

\textsuperscript{10} The Irish Department of Jobs, Enterprise and Innovation determines the salary thresholds; the first revision, after six years, lowered the threshold by 10% for certain occupations.

\textsuperscript{11} Denmark, Ireland and the United Kingdom are exempt.

\textsuperscript{12} While these lists were intended to be revised periodically based on labour market conditions, in practice they have been largely fixed. See the lists here: www.immigration-professionnelle.gouv.fr/sites/default/files/fckupload/arrete_du_18-01-2008_%20liste_30.pdf
Canada has also used shortage occupation lists at the provincial level for the temporary foreign worker programme. In the mid-2000s, these lists were drawn up by Human Resources and Skills Development Canada (HRSDC) to loosen labour market test requirements such as advertising periods. The lists were eliminated in 2009, although specific occupations in certain provinces benefit from facilitations, and Québec continues to use a list of shortage occupations in its permanent migration programme and for labour market test exemptions in its temporary foreign worker approval system.

The United Kingdom Migration Advisory model (MAC, 2008) is based on labour market indicators but involves “bottom-up” evidence (through consultations and submission of evidence) to supplement or eliminate occupations identified through quantitative screening (For more information about the MAC, see Martin and Ruhs paper in this special issue).

In New Zealand, the Ministry of Business, Innovation and Employment (MBIE) manages lists of occupations deemed to be in shortage in New Zealand. Temporary work visa applications for occupations included in a shortage list are exempt from a labour market test. There are two main lists: the Long-term Skill Shortage List (LTSSL), for skilled jobs in shortage nationally, subject to a salary threshold; and the Immediate Skill Shortage List (ISSL), for highly skilled jobs in regional shortage. The underlying data used to develop these lists are taken not only from the labour market (vacancy data, unemployment data) but are also based on analysis of current training for the occupations in question and an evaluation of industry attempts to solve the shortage without migrant workers. Skilled occupations likely to be under shortage in the medium and long term are included in the LTSSL lists and are exempt from a labour market test to indicate future skill needs to both employers and future migrants. Requests involving occupations listed in the ISSL are exempt from a labour market test for a temporary work visa.

The two lists are reviewed annually by the Migration Research department at the MBIE, based on submissions from industry stakeholders, but the MBIE exercises its own discretion in choosing which occupations to review. The process includes evaluation and further rounds of consultation and empirical analysis – including preliminary reporting - before the MBIE finalises the lists.

Other uses of shortage occupation lists
Shortage occupation lists are used for purposes different from labour market test exemption. The LTSSL occupations in New Zealand, for example, also provide bonus points for permanent residence applications. Similarly, Canada used, from 2008–2011, a shortage list developed and promulgated by the Min-

13 These lists are called “Essential Skills in Demand” (ESID) lists.
14 The 7-step process is detailed here: www.immigration.govt.nz/migrant/general/ generalinformation/review.htm
ister of Immigration which identified occupations (at a 4-digit level, using the NOC classifications) for which priority processing would be granted under the Federal Skilled Worker Programme, the points-based selection system. Occupations were identified based primarily on the labour market projections of HRSDC and provinces and territories, plus input from employers and partners (Kustec, 2012). In 2010, this shortage list was the only way to enter Canada under the Federal Skilled Worker programme without a job offer in hand. Caps were set on overall admissions under this list and on the number of job-seekers in each occupation – 1,000 in 2010 and 500 in 2011. The list was eliminated altogether in 2012, due to both processing concerns – the list did not grant priority processing – and in an effort to be “more responsive to the labour market” (Kustec, 2012).

Sweden’s shortage occupation list is a limited-scope instrument used only for in-country changes of status (OECD, 2011b). It uses an existing semi-annual occupational shortage indicator, the Occupational Barometer, drawn up by the public employment agency that ranks occupations according to their level of shortage. The shortage indicator is based on submissions from 200 local employment bureaus, each of which applies a quantitative analysis and expresses a judgement based on local labour market characteristics. The Migration Board then sets a fixed threshold for “shortage”, and consults social partners before revising the list.

Australia’s Shortage Occupation List (SOL), which determines eligibility and ranking for skilled migration, is also based on a skilled occupational list drawn up by the employment agency (AWPA) for the purposes of national workforce development. AWPA draws up the SOL after consultations with industry representatives and key stakeholders.15

The EU Blue Card allows a lower salary threshold for shortage occupations, thus creating a precedent for the expansion of shortage lists in EU countries where they are not currently used.

Finally, shortage lists may also be negative, i.e., lists of occupations for which recruitment is not allowed. An “ineligible occupations” list is drawn up and revised regularly in Ireland by the Department of Jobs, Enterprise and Innovation and includes all low-skilled occupations and many construction trades and other medium-skill occupations. France also has a list of restricted professions. Portugal’s legislation grants the Ministry of Labour the prerogative to identify ineligible occupations, although it has not done so.

**Impact of shortage lists and complex criteria**

Many OECD countries using shortage lists invest significant resources in analysing occupations, only to find that most labour migrants come through channels, such as the general labour market test, in which the shortage list and

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its exemptions are of little relevance. Most discretionary labour migration under Tier 2 in the United Kingdom, for example, occurs either through the Resident Labour Market Test or through other channels where the shortage list does not apply, such as intra-company transfers. In Sweden, in-country status changes under the shortage list exemption account for only 0.4% of total labour migration, even though 40% of migration is for occupations on the list. In New Zealand, the shortage lists account for half of entries under the “Essential Skills” temporary labour migration programme. However, as New Zealand’s labour market test is a non-binding opinion, the shortage list appears to have more of an impact on the number of processing steps rather than on actual admissions. Denmark’s list serves as the grounds for admission for fewer than 100 labour migrants annually, less than 2% of labour migration in 2010-2012.

This raises the question of the role of shortage lists in determining inflows. In a number of countries, shortage occupation lists comprise only a handful of occupations and by definition represent those occupations where businesses have the most acute need for workers and are most likely to try to recruit from abroad. In Germany, a large share of labour migration is in occupations already exempt from labour market tests, and the labour market test rarely leads to rejection of skilled employment applications, so the exemption appears of little practical value.

Shortage lists however communicate to the public that a migration system is selective and focused on specific skills. Lists provide a focus for professional bodies, employers, and unions to debate which occupations should be on or off the list, and may serve as a signal to employers by encouraging them to think of recruiting migrants if the occupation is on the list. Shortage lists may also signal to employers and government where training is required to address a shortage of domestic workers.

Not all countries have incorporated complexity into their systems. Sweden’s 2008 reform eliminated occupational requirements and now imposes only a nominal labour market test on admission, relying on the inherent costs of hiring migrants (OECD, 2011b). As Sweden relies on trade unions in workplaces to ensure compliance with prevailing standards for wage and working conditions, the applicability of the Swedish approach elsewhere would be contingent on workplace enforcement capacity.

Conclusion
Legislation and administrative practice in OECD countries has introduced ever-increasing complexity into migrant selection and admission systems.

16 Sweden initially saw a steady increase in labour migration for less skilled employment in parts of the labour market which are poorly covered by collective agreements and union enforcement, although closer review of applications appears to have halted this trend in 2012. Fraudulent use of seasonal work permits (visa floating) has been combated by imposing employer requirements rather than a quota.
Multiple parameters and the need for frequent revision have led to the creation of a variety of institutional responses to develop and analyse qualitative and quantitative employment data. Where occupational data are available, they can be used to produce shortage lists, while demographic and education data are used to set migration quotas for longer-term labour force development objectives. Shortage lists, usually developed within public bodies, are rarely based entirely on quantitative analysis, and initial lists are often changed after consultation with labour market stakeholders, including social partners. The institutional configuration depends on political factors as well as on the capacity of the public administration to identify and collect data and to conduct analysis.

Although no single model is appropriate for all countries, it appears that creating analysis-based mechanisms to set migration parameters has been favoured over deciding these details through a political process. Objectives may be set at the political level, but the tools to achieve these objectives are often fine-tuned by revision based on evidence. In no case in Europe, however, are quantitative indicators used exclusively to determine eligibility for admission: interest groups always have a role in adjusting admission criteria.

Independent commissions are by no means the only or ideal solution for generating expertise, but may be most applicable where political controversy over migration means that political determination of these details is inefficient or incompatible with the need to respond to rapidly changing economic conditions. Evidence-based mechanisms for setting parameters can play a useful role in ensuring a response to these conditions, but only where political processes have set a clear objective for migration policy. These mechanisms are subservient to explicit policy goals. As political mood can change even more rapidly than economic conditions, rigid evidence-based mechanisms for regulation may struggle more to adapt to shifting policy goalposts than to labour market developments.

References
DEEWR - Department of Education, Employment and Workplace Relations and


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