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JOB SEARCH WITH LEGAL AND ILLEGAL WORKERS: A COMPARATIVE STATIC ANALYSIS

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Abstract. This paper incorporates government immigration policy variables in a job search and match framework to examine its implication on labour market outcomes. The main assumption is that illegal workers can be penalized by receiving lower equilibrium wages or face possible deportation; and government can regulate illegal workers by introducing a "caught variable", η, in the model. By a comparative statics analysis, the study has revealed that changes in the wages of illegal workers have both direct and indirect effect on wages of legal workers. Also, an important finding is that η has positive impact on most of the labour market parameters considered in the study.

Keywords*: Bargaining power, Job creation, Illegal workers, Unemployment, Wages.*

JEL Classification: F22; J61; J64

INTRODUCTION

Why do people migrate? Among the unending list of answers to this question is the search for greener pasture. People are likely to migrate when there is a chance to have a better life. This movement can be internal (within counties, cities, or states) or external, thereby altering the labour market structure. In recent years, the increasing number of undocumented immigrants, especially in most developed countries, has generated debates over the types of immigration policies that should be enacted. In the United States, for example, the number of undocumented immigrants has increased rapidly since the 1970s (Chiswick, 1988; Djajić, 1997). Over the period of 1980–2006, the total population of unauthorised immigrants in the United States has increased from three million to about 12 million (Passel, 2006), prompting various types of immigration policy reforms targeted at controlling both the existing population and future flows of undocumented immigrants. These reforms have spurred heated discussions as those in support of legalizing the status of illegal immigrants argue that the inflow of immigrants has contributed to US economy, whereas opponents argue that the inflow of immigrants intensifies the competition in the labour market, worsen the labour market position of domestic workers, and unfairly reward the law-breaking behaviours.

In the United States, under the current administration, attention has been geared towards the stopping of illegal border crossings by all means, especially at the Mexico borders, which is historically the main source of migration into the United

States (Mariam, 2018, p. A16). There are other means by which illegal workers enter the labour force. For instance, non-immigrants can legally come into the country as business/tourist visitors, student and exchange visitors, conference attendants, religious workers, temporary and treaty workers etc. The U.S. Department of Homeland Security (DHS) identified more than 700 000 overstays in the Fiscal Year (FY) 2017 (about 1.33 % overstay rate). In order to survive, some of these illegal non-immigrants join the labour force and therefore alter the labour market structure.

Earlier studies focus on the internal migration of workers from within and outside the states (Ortega, 2000; Sato, 2000), while others focus on its impact on wage determination and unemployment (Coulson, Laing and Wang, 2001; Diamond, 1982; Pissarides, 1987). With regard to external migration, Horton, Kerr and Stanton (2017) examine the digital labour market and the consequences of highly skilled migrants to the United States. In recent years, studies by Moy and Yip (2006), Palivos and Yip (2007), and Palivos (2009) have investigated the economic consequences of illegal immigration using standard neoclassical growth models with the common assumption that irrespective of the presence of illegal immigrant in the domestic economy, there is always full employment in the domestic labour market, hence ruling out any possible impact of illegal immigration on the employment opportunities of domestic workers. Relaxing this assumption, Liu (2010), using a dynamic general equilibrium model, found that an increase in illegal immigration could generate significant welfare gains for the natives.

There is a growing literature of search models in migration studies. While earlier models use the one-side approach (see, e.g., Banerjee, 1984; Mohtadi, 1989), most recent literature incorporates the search-matching approach of Mortensen-Pissarides (1999) in a Harris-Todaro model (1970), with significant modifications to suit their research questions. Laing, Park and Wang (2005) developed a search equilibrium model to study the economic consequence of regionally unbalanced development in China. Their study showed that the enforcement of the household registration rule in China, as a way of discouraging illegal migration, led to a higher job finding rate and a lower urban unemployment rate.

This study extended the work by Laing, Park and Wang (2005), Coulson, Laing and Wang (2001) and Park (1999), and applied a search theoretical approach with legal and illegal workers where both the migration probabilities and migration flows were endogenously determined.[*] The study assumed that illegal workers could be penalized in two ways: (i) without legal authorisation, they receive lower equilibrium wages than those received by legal workers and (ii) they are more likely to lose their jobs and face possible deportation.

Given these conditions, the broad objective of this paper is to incorporate government immigration policy variables in a job search model and examine their possible implication on labour market outcomes. The two variables considered are: (i) the "caught parameter" which increases the chances of an illegal worker being

[*] Conventional urban matching models do not consider the stochastic nature of the search process. See Helsley and Strange (1990) and Abdel-Rahman and Wang (1995)

identified due to government policies such as E-Verify– proper background checks for employee before employment; (ii) the "firm penalty parameter" which is imposed by the government on firms who are caught hiring illegal workers. The study shows that the steady-state equilibrium exists and is unique. By a comparative-static analysis, the model shows that change in wages of illegal workers changes the unemployment rate in an Island, and this has both direct and indirect effect on wages of legal workers.

1. THE BASIC ENVIRONMENT

On an Island, there are identical workers with different residence status, legal (L) and illegal (I). Let the continuum of workers mass be normalized to one, such that $E + U = 1$, where E is the total number of employed workers (both legal and illegal), and U is the total number of unemployed workers (both legal and illegal). Among the total workforce, the mass $1- N$ is legal workers while the mass N is illegal, such that:

$$N = E_{\mathrm{I}} + U_{\mathrm{I}};\ 1 - N = E_{\mathrm{L}} + U_{\mathrm{L}}. \tag{1}$$

$$E = E_{\mathrm{L}} + E_{\mathrm{I}}; U = U_{\mathrm{L}} + U_{\mathrm{I}}. \tag{2}$$

Endowments: Each worker is endowed with a unit of labour which can be supplied to firms inelastically.

Preferences: I consider a continuous time economy in which workers and firms are risk neutral and discount their future payoffs at the rate, $r > 0$.

Technologies: Both workers on the Island market conduct a job search that is mediated through a random searching technology. There are many workers and many firms, each of whom is either matched with a member of the other side or unmatched.[†] There is free entry of firms into the Island market, in the sense that any firms can enter the market and incur a fixed cost $K > 0$, which captures both the firms' start-up and capital costs (Laing, Park, & Wang, 2005).

Market Information: On the Island there are search frictions. The labour market interactions between workers and firms follows the standard search matching framework (Mortensen and Pissarides, 1999; Pissarides, 2000). Let unfilled vacancies in the economy be denoted by V. Each firm has only one vacancy which can be filled by a single worker. The study follows the assumption of Laing, Park, & Wang (2005) of non-arbitrage condition in the labour market, which ensures that there are no incentives to move from one Island to another in the steady state equilibrium.[‡]

Given the matching process, workers on the Island are either unemployed and searching for job or else currently employed. On the other hand, firms either have

[†] Pissarides (1987) defines unmatched jobs as job vacancies and unmatched workers as unemployed workers

[‡] If this condition is violated, then a mass of workers would "jump" from one Island to another, which would discretely reduce the value of searching in that Island

an open vacancy and are searching for labour or alternatively they have filled vacancy and are producing output. More precisely, I begin by stating the matching function as:

$$M = M\left(U,V\right), \tag{3}$$

where M is the total number of matches. $M(.)$ is strictly increasing in both argument, strictly concave, homogeneous of degree 1, and that $M(0,V) = M(U,0) = 0$ for all $U,V \geq 0$. Finally, it satisfies the Inada conditions.[§] As usual, the parameter $\theta = \frac{V}{U}$ is defined as the labour market tightness. The probability with which an individual unemployed worker is matched with a firm posting a vacancy is given by $\frac{M\left(U,V\right)}{U} = M\left(1,\frac{V}{U}\right) = M\left(1,\theta\right) \equiv q\left(\theta\right)$, with $q'\left(\cdot\right) > 0$. Similarly, the probability that an individual firm posting a vacancy is matched with a worker is $\frac{M\left(U,V\right)}{V} = M\left(\frac{U}{V},1\right) = M\left(\frac{1}{\theta},1\right) \equiv f\left(\theta\right)$, with $f'\left(\cdot\right) < 0$. With the constant-returns property, a straightforward manipulation of Eq. (3) yields:

$$f\left(\theta\right) \equiv \theta q\left(\theta\right). \tag{4}$$

Eq. (4) is the steady-state matching (SS) locus, which shows a negative relationship between the flow probabilities in the steady state. By further manipulation using Eq. (4) and the labour market tightness definition, I arrive at the mass of vacancy given by

$$V = \frac{q\left(\theta\right)}{f\left(\theta\right)}U, \tag{5}$$

which is an increasing function of the worker's flow probability $q\left(\theta\right)$.

I assume that in each period, workers and firm separate for exogenous reasons. A legal worker has a separation rate denoted by δ, while an illegal worker's separation rate is $(\delta + \eta)$. Here $\eta > 0$ is the additional probability of illegal worker to be caught and it depends on the number of illegal workers on the Island. While unemployed, a legal worker receives unemployment benefits, *b*, each period.

Let $\rho = \frac{U_{\mathrm{I}}}{U_{\mathrm{I}} + U_{\mathrm{L}}}$ be the fraction of illegal searching workers on the Island. It follows that the probability a vacant firm meets an illegal worker is $\rho f\left(\theta\right)$, while it meets a legal worker is $\left(1-\rho\right) f\left(\theta\right)$.

[§] This assumption ensures a well-behaved, Beverage curve in which the absence of either side of the matching parties would result in no matches (see Laing, Park, & Wang, 2005)

Hypotheses Tested:

Ho_1: Government immigration policy does not affect aggregate unemployment.

Ho_2: Government immigration policy does not affect wages of legal workers.

2. THE PROBLEM

Let us denote the wage of illegal and legal employed workers as w_{I} and w_{L}, respectively. For simplicity, I assume that illegal workers receive a fixed wage, while legal workers receive a Nash bargaining wage. This assumption might not be realistic but there are some reasons to make it.[**] Let $W_{\mathrm{L}}^{\mathrm{E}}$ and $W_{\mathrm{L}}^{\mathrm{U}}$ denote the respective value of an employed and unemployed legal worker. The corresponding values for illegal workers are $W_{\mathrm{I}}^{\mathrm{E}}$ and $W_{\mathrm{I}}^{\mathrm{U}}$. On the other hand, the present-discounted value of being matched with either a legal or an illegal worker is J_{L} and J_{I}, respectively, and the expected present-discounted value of an idle firm is J_{V}, which is independent of productivity *y* as a firm does not know in advance what type of worker it will meet.[††]

Bellman equation for Island workers: I assumed that illegal workers are paid a fixed wage but less than the wages of legal workers on the Island, i.e., $w_{\mathrm{I}} < w_{\mathrm{L}}$.

$$rW_{\mathrm{L}}^{\mathrm{E}} = w_{\mathrm{L}} + \delta\left(W_{\mathrm{L}}^{\mathrm{U}} - W_{\mathrm{L}}^{\mathrm{E}}\right). \tag{6}$$

$$rW_{\mathrm{L}}^{\mathrm{U}} = b + \mathrm{q}(\theta)\left(W_{\mathrm{L}}^{\mathrm{E}} - W_{\mathrm{L}}^{\mathrm{U}}\right). \tag{7}$$

$$rW_{\mathrm{I}}^{\mathrm{E}} = w_{I} + \delta\left(W_{\mathrm{I}}^{\mathrm{U}} - W_{\mathrm{I}}^{\mathrm{E}}\right). \tag{8}$$

$$rW_{\mathrm{I}}^{\mathrm{U}} = \mathrm{q}(\theta)\left(W_{\mathrm{I}}^{\mathrm{E}} - W_{\mathrm{I}}^{\mathrm{U}}\right). \tag{9}$$

Bellman equation for Island employers: Firms hire illegal workers only if the match surplus is positive, $J_{\mathrm{I}} \geq 0$. When a firm that hires illegal workers gets caught, it incurs an additional cost, ηC. The condition needed to form a firm-illegal worker pair is, thus, $y \geq w_{\mathrm{I}}$. Otherwise, it is not worth for a firm to hire illegal workers. The flow value functions are:

$$rJ_{\mathrm{L}} = y - w_{\mathrm{L}} + \delta\left(J_{\mathrm{V}} - J_{\mathrm{L}}\right). \tag{10}$$

$$rJ_{\mathrm{I}} = y - w_{\mathrm{I}} + \delta\left(J_{\mathrm{V}} - J_{\mathrm{I}}\right) + \eta\left(J_{\mathrm{V}} - J_{\mathrm{I}} - C\right). \tag{11}$$

[**] For example, firms that hire illegal workers ae aware of the workers status; hence, they want to extract more surplus from the match relationship and therefore pay fixed wage. On the other hand, illegal workers might accept a fixed wage in the hope that they can become legal in the long run.

[††] The assumption here is that legal and illegal workers are equally productive.

Finally, the expected flow value from successfully hiring either a legal worker or illegal worker is:

$$rJ_{\mathrm{V}} = -K + f(\theta)\left[\rho\left(J_{\mathrm{I}} - J_{\mathrm{V}}\right) + (1-\rho)\left(J_{\mathrm{L}} - J_{\mathrm{V}}\right)\right]. \tag{12}$$

Free entry drives J_{V} to zero in steady state.

Lemma 1 (Job Creation Condition): From Eq. (12) I have

$$\rho J_{\mathrm{I}} + (1-\rho) J_{\mathrm{L}} = \frac{K}{f(\theta)}. \tag{13}$$

Similarly, collecting terms in Eqs. (10) and (11) yields:

$$J_{\mathrm{L}} = \frac{y - w_{\mathrm{L}}}{r + \delta}; \tag{14}$$

$$J_{\mathrm{I}} = \frac{y - w_{\mathrm{I}} - \eta C}{r + \delta + \eta}. \tag{15}$$

Substituting Eqs. (14) and (15) into Eq. (13) gives the equilibrium job creation condition:

$$\frac{\rho\left(y - w_{\mathrm{I}} - \eta C\right)}{r + \delta + \eta} + \frac{(1-\rho)\left(y - w_{\mathrm{L}}\right)}{r + \delta} = \frac{K}{f(\theta)}. \tag{16}$$

The left-hand-side of Eq. (16) is either constant (if the wage is constant) or decreasing in θ (if the wage increases in θ), while the right-hand-side is increasing in θ.

3. LEGAL WORKER'S WAGE BARGAINING ON THE ISLAND

I assume that wages of legal workers are determined by a Nash bargain between workers and firms:[‡‡]

$$\left[W_{\mathrm{L}}^{\mathrm{E}}(w) - W_{\mathrm{L}}^{\mathrm{U}}\right]^{\alpha}\left[J_{\mathrm{L}}(w) - J_{\mathrm{V}}\right]^{1-\alpha}. \tag{17}$$

The first-order condition for maximum simplifies to

$$\alpha W_{\mathrm{L}}^{\mathrm{E}}(w)\left[W_{\mathrm{L}}^{\mathrm{E}} - W_{\mathrm{L}}^{\mathrm{U}}\right]^{\alpha-1}\left[J_{\mathrm{L}} - J_{\mathrm{V}}\right]^{1-\alpha} - (1-\alpha) J_{L}^{'}(w)\left[W_{\mathrm{L}}^{\mathrm{E}} - W_{\mathrm{L}}^{\mathrm{U}}\right]^{\alpha}\left[J_{\mathrm{L}} - J_{\mathrm{V}}\right]^{-\alpha} = 0. \tag{18}$$

[‡‡] See (p.7 fn 4) of Schutz (2009).

From Eq. (2) $W_{\mathrm{L}}^{\mathrm{E}} = \frac{1}{r+\delta}$; from Eq. (14) $J_{\mathrm{L}}^{'}(w) = \frac{-1}{r+\delta}$. For simplicity, let us assume $\alpha = \frac{1}{2}$. This implies that both parties bargain cooperatively to maximise their equal weighted joint surplus (Laing, Park, & Wang, 2005). Thus, the wage offer made to legal worker must satisfy:

$$W_{\mathrm{L}}^{\mathrm{E}} - W_{\mathrm{L}}^{\mathrm{U}} = J_{\mathrm{L}} - J_{\mathrm{V}} > 0. \tag{19}$$

By manipulating Eqs. (6) and (7), I arrive at:

$$W_{\mathrm{L}}^{\mathrm{E}} - W_{\mathrm{L}}^{\mathrm{U}} = \frac{w_{\mathrm{L}} - b}{r+\delta+\mathrm{q}(\theta)}. \tag{20}$$

Similarly, manipulating Eq. (12) and subtracting from Eq. (10) gives

$$J_{\mathrm{L}} - J_{\mathrm{V}} = \frac{y_{\mathrm{L}} - w_{\mathrm{L}} + K - \rho\theta\mathrm{q}(\theta)J_{\mathrm{I}}}{r+\delta+(1-\rho)\theta\mathrm{q}(\theta)}. \tag{21}$$

Next, I obtain the wage offer function of a legal worker by substituting Eqs. (20) and (21) into Eq. (19) and characterise their properties as follows:

Proposition 1 (Wage Offer): *The unique wage offer function determined by the Nash bargain between the legal worker and the firm is given by*

$$w_{\mathrm{L}} = \frac{(r+\delta+\mathrm{q}(\theta))\left[y+K-\rho\theta\mathrm{q}(\theta)J_{\mathrm{I}}\right] + b\left[r+\delta+(1-\rho)\theta\mathrm{q}(\theta)\right]}{2(r+\delta)+\left[1+(1-\rho)\theta\right]\mathrm{q}(\theta)}. \tag{22}$$

The following properties hold:

$$\frac{\partial w_{\mathrm{L}}}{\partial \mathrm{q}(\theta)} > 0;\ \frac{\partial w_{\mathrm{L}}}{\partial J_{\mathrm{I}}} < 0;\ \frac{\partial w_{\mathrm{L}}}{\partial b} > 0.$$

Eq. (22) is increasing in θ. Intuitively, as the labour market tightness increases, the probability of an unemployed legal worker matching a vacant position also increases; this therefore strengthens his bargaining power, and leads to a higher wage offer. Contrarily, an increase in the value of an unfilled vacancy to be filled by an illegal worker, J_{I}, reduces the wage offer of legal workers since the firm can easily opt for an illegal worker and pay lower wage, w_{I}. Also, an increase in the social benefit, *b*, for unemployed legal workers will make potential workers preferring to stay unemployed in order to benefit from the higher social welfare. This will increase the wage bargaining strength of those legal workers willing to work; hence, they will earn higher wages.

4. STEADY STATE EQUILIBRIUM

By substituting Eq. (15) into Eq. (22), the equilibrium wage can be written:

$$w_{\mathrm{L}} = \frac{\left(r+\delta+\mathrm{q}(\theta)\right)\left[y+K-\rho\theta q(\theta)\left(\frac{y-w_I-\eta C}{r+\delta+\eta}\right)\right]+b\left[r+\delta+(1-\rho)\theta\mathrm{q}(\theta)\right]}{2(r+\delta)+\left[1+(1-\rho)\theta\right]\mathrm{q}(\theta)}. \tag{23}$$

Also, in the steady-state equilibrium, the flows into and out of unemployment should be equal so that

$$(\delta+\eta)E_{\mathrm{I}} = \mathrm{q}(\theta)U_{\mathrm{I}} \tag{24}$$

$$\delta E_{\mathrm{L}} = \mathrm{q}(\theta)U_{\mathrm{L}} \tag{25}$$

combining with Eqs. (1) and (2), I can manipulate to get the masses of employed and unemployed workers:

$$E_{\mathrm{I}} = \frac{\mathrm{q}(\theta)N}{\delta+\eta+\mathrm{q}(\theta)}; \tag{26}$$

$$E_{\mathrm{L}} = \frac{\mathrm{q}(\theta)(1-N)}{\delta+\mathrm{q}(\theta)}; \tag{27}$$

$$U_{\mathrm{I}} = \frac{(\delta+\eta)N}{\delta+\eta+\mathrm{q}(\theta)}; \tag{28}$$

$$U_{\mathrm{L}} = \frac{\delta(1-N)}{\delta+\mathrm{q}(\theta)}. \tag{29}$$

Eqs. (26–29) are quite intuitive. A high θ – an indicator of a thicker labour market implies that the employment level rises for both type of workers whereas the unemployment level falls. On the other hand, if the government becomes stricter in enforcing legal authorisation for work, the probability of being caught, η, will increase. This will reduce the employment level of illegal workers and increase their level of unemployment.

Combining Eqs. (28) and (29) and simplifying further gives:

Lemma 2 (Aggregate Unemployment): *The aggregate unemployment in the society is given by*

$$U \equiv U_{\mathrm{L}} + U_{\mathrm{I}} = \left[\frac{\delta(1-N)}{\delta+\mathrm{q}(\theta)} + \frac{(\delta+\eta)N}{\delta+\eta+\mathrm{q}(\theta)}\right] \tag{30}$$

satisfying:

$$\frac{\partial U}{\partial \theta}\left\langle 0;\frac{\partial U}{\partial \eta}\right\rangle 0.$$

The result is straightforward: the thicker the labour market on the Island, the lower the aggregate unemployment, whereas the higher the probability of being caught, the higher the aggregate level of unemployment. Nevertheless, the second part of the statement should be treated with caution, in that the result holds with the assumption that illegal workers that lose their jobs in the current period enter the labour market as unemployed workers in the next period. On the other hand, if illegal workers are deported, the aggregate unemployment will reduce, thereby giving more wage bargaining power to legal workers. The result clearly rejects the first hypothesis (Ho_1) and concludes that the government immigration policy affects aggregate unemployment.

Finally, plugging Eq. (30) into Eq. (5) and using the identity Eq. (4) gives:

$$V = \frac{1}{\theta}\left[\frac{\delta(1-N)}{\delta+q(\theta)}+\frac{(\delta+\eta)N}{\delta+\eta+q(\theta)}\right], \tag{31}$$

which is increasing in θ.

Definition (Steady-State Equilibrium): *A steady-state equilibrium is a pair* (θ^*, w_L^*) *that satisfies the following conditions:*

(i) Job Creation Condition: Eq. (16);

(ii) Wage offer: Eq. (21);

(iii) Steady-State Population: Eqs. (26–29) and Eq. (31).

Proposition 2 (Existence and Uniqueness): *From Eq. (16), the steady-state equilibrium exists and is unique.*

5. COMPARATIVE STATICS

The steady-state comparative statics for some of the parameters are summarised in Table 1. A steady-state increase in labour productivity, leads to higher labour market tightness, whereas the increase in y results in an increase in w_L. Also, an increase in the cost of posting vacancy *K* decreases labour tightness and vacancies, meanwhile unemployment increases. Changes in job separation rate δ and interest rate *r* have a similar effect. An increase in either *r* or δ lower labour market tightness results in higher unemployment and lower vacancies.

One significant finding is that an increase in the government enforcement approach towards legal authorisation for job seekers (raising η) has a significant effect on the unemployment level on the Island. This is so because as illegal workers

get caught easily, their chances of being employed diminish and they also face possible deportation. If they lose their jobs without deportation, the total unemployment pool will increase in the next period, hence reducing the wages of legal workers. Contrarily, if illegal workers are caught and deported, it reduces the total unemployment pool, thereby increasing the wage bargained by legal workers. This implies that the government immigration policy affects wages of legal workers either directly or indirectly. Hence, the claim of the second hypothesis (Ho_2) is rejected. The effect on vacancy holds analogously.

From a policy perspective point of view, government can choose to subsidise the vacancy posting cost *K*. If it does so, the job creation curve will tilt upwards while the wage curve becomes flatter (tilt downwards). As a result, equilibrium labour market tightness increases, as do vacancy, and unemployment decreases. The effect on the wage is ambiguous.

In addition to the comparative statics considered above, the additional cost that a firm will incur if caught hiring an illegal worker will have a key role to play in firm's hiring decision making. If different state laws impose different penalty, *C*, firms will tend to move to states with lower penalty and exploit the benefit of hiring illegal workers; thus, the legal workers in such states might face lower wages. On the contrary, if the penalty is very high, a firm will prefer to hire legal workers and pay a higher wage rather than facing the "avoidable" penalty of being caught with illegal workers.

Table 1. Comparative Statics

	y	K	δ	r	η
θ	+	–	+	+	+
w_L	+	?	–	–	+/–
U	–	+	+	+	–/+
V	+	–	?	–	+

Note: "?" Indicates an ambiguous effect of the parameters in column.

CONCLUSION

The study introduced possible government immigration policy variables into a job search and match framework with specific focus on legal and illegal workers in the United States. By analysing the residence status of immigrants, the study shows that illegal immigrants without work permit have possibility of providing additional value, if they are incorporated into the labour force. However, adequate control must be made to enhance the efficiency of the labour market condition. Thus, this study strongly supports the need for government regulation in the labour market for these categories of workers by introducing a caught variable, η, which increases their separation rate in the labour market. One of the key findings is that η has a

positive impact on most of the labour market parameters considered in this study. Government can also choose to manipulate *C* to achieve its political agenda at every point in time. Future studies can focus on how migration from one Island to another affects labour market outcomes, with the possibility of having different matching functions for legal and illegal workers, which will result in different labour market tightness. This extension will uncover further implication of legal and illegal workers on the labour market and provide yardsticks for future planning and control mechanism.

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