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EC367 – INTERNATIONAL TRADE

ASSIGNMENT

Term Paper

NAME: SYAZA ADILA BINTI MD RAFAI

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QUESTION 1:

*"**Trade and Migration.** The use of trade policy to deal with the migration problem has been considered by both the European Union and the United States policy-makers. Presidents Carlos Salinas and George H.W. Bush argued that the North American Free Trade Agreement (NAFTA) would have helped Mexico to export more goods and less people. These statements are based on the view that trade liberalization would have increased the level of exports from the Southern countries increasing labor demand in the same countries and therefore decreasing migration from these countries. Investigate the effect of the creation of free trade areas on the migration flows."*

INTRODUCTION

International trade and migration has been taking the news headlines and main discussion topics over the past decade. It has been debated that trade liberalisation encourages migration instead of mitigates it as addressed by the trade policy, North American Free Trade Agreement (NAFTA) which is signed by United States to reduce the undocumented Mexican migration flow. It is a trade agreement between the United States, Mexico and Canada creating a free trade area of the three countries. Free trade area is a group of countries that agree to eliminate tariffs and other import restrictions on each other´s goods, while each participating country applies its own independent schedule of tariffs to imports from countries that are not members[1].

The creation of free trade areas come with policies and rules that are beneficial to many economic and non-economic aspects including economics integration and countries development. However, does these aspects include lower rate of migration? How does trade liberalisation affect migration? This essay will discuss the effect of the creation of free trade areas on the migration flows, focusing on the implementation of NAFTA as the main example. There are two parts of this essay with the first part discussing about trade and migration as complements. In the second, it looks into the case of trade and migration being substitutes.

NORTH AMERICAN FREE TRADE AGREEMENT (NAFTA)

NAFTA was preceded by the Canada-U.S. Free Trade Agreement, signed in 1988 and implemented a year later. In 1990, Canada, the United States and Mexico agreed to a free

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[1] Global Negotiator. (anon. n.d.) *Dictionary of International Trade*. Retrieved October 25, 2016, from http://www.globalnegotiator.com/international-trade/dictionary/free-trade-area/

trade agreement which created NAFTA. NAFTA was then signed by the leaders of all three countries in 1992 before NAFTA was legally enforced on January 1, 1994. Summarized by Acevedo and Espenshade (1992) in their paper, the main provisions of NAFTA are:

- All import tariffs on manufactured goods and agricultural products traded among the member countries will be eliminated. Goods that are entirely produced in North America only will be exempt from tariffs with a rules-of-origin system.
- Most tariffs on agricultural products will be eliminated over a ten-year period. However, for those crops that are unusually sensitive to level of imports (for example, corn and beans in the Mexican case and peanuts, broccoli, cauliflower, onions, orange juice concentrate, sugar, and asparagus in the case of the United States), the phase-out period for tariffs will stretch over 15 years.
- Tariffs on textiles and apparel will be eliminated over a ten-year period if the manufacture of these goods complies with the rules-of- stipulations origin described in NAFTA. For instance, textiles will be exempt from tariffs if they are made from North American thread, and apparel will be exempt if clothing is made from North American fabrics.
- The automobile market will gradually be opened over a ten-year period.
- Mexico's state-owned oil company (PEMEX) will allow foreign companies to bid for drilling, exploration, and service contracts, but Mexico will neither allow foreign ownership of its oil reserves nor guarantee the United States a specific annual allotment of oil.
- The US and Canadian companies operating in Mexico will have the same rights as Mexican companies, and vice versa.
- The US and Canadian banks and investment and insurance companies will be allowed to operate in Mexico, and vice versa.

NAFTA also outlines other conditions that assure national and state environmental, health, and safety standards remain under the responsibilities of the trade pact. It has been widely debated that NAFTA plays a vital role in explaining migration behaviour among the member countries which will be discussed in the next section. Researchers came out with the results of immigration regulations enforcement may not be effective in order to control immigration flows. Due to this, government leaders in Canada, Mexico and the United States believe that NAFTA would reduce migration among the participating countries through trade liberalisation. An empirical work by Del Rio and Thorwarth (2009) revealed that illegal immigration has not declined as a result of tighter border controls, considering immigration policies such as Immigration Reform and Control Act (IRCA), passed by Congress in 1986 and Immigration Act launched in 1991. They also summarised the relationship of trade and migration based on theoretical models in a table (Table 1) which few of the models will be covered in this essay.

Model	Trade and migration are...
Heckscher-Ohlin-Samuelson	Substitutes
Different technologies	Complements
Increasing returns to scale	Complements
Ricardo-Viner-specific factors	Complements or substitutes
López-Schiff	Complements or substitutes
"Migration hump"	Complements in the short term, substitutes in the long term
Feenstra-Hanson	May be complements, there is no factor price convergence
Markusen-Venables	May be complements, there is no factor price convergence

Table 1[2] Theoretical Models

TRADE AND MIGRATION AS COMPLEMENTS

In short-to-medium run, it is likely that free trade increases migration between countries. With the creation of free trade area between countries with different economic conditions; a developing country and a developed country[3], there is always winners and losers. While trade liberalisation is seen as the answer to reduce migration through economic development, it seems that any measure to improve Mexico's economic development would put greater pressure to increase migration even more.

During this period, investments are made in order to improve economic growth through free trade. However, there is a time lag for jobs to be created from the investments. There will be displacement of labour with capital, destroying jobs instead of creating them.

[2] Del Rio, A.M., & Thorwarth, S. (2009). Tomatoes or Tomato Pickers? Free Trade and Migration Between Mexico and The United States. *Journal of Applied Economics, 12(1)*, 109-135.
[3] For simplicity, we use a developing country and a developed country.

Assuming that the developed country has a more productive technology in the labour-intensive sector, it will specialise in producing the labour-intensive good as its export and have a higher wage without labour mobility. With labour mobility, there will be labour inflow from the developing country because workers migrate to wherever that offers the highest wages. Workers from the country will migrate to the developed country that has higher productivity labour-intensive sector to exploit the higher wage, hurting workers in the destination country[4]. By doing so, they can earn more. This inflow continues until the purchasing power of wages is equal across both countries.

With increasing return to scale, the bigger economy will specialise in manufacturing goods and be a net exporter in the sector. Wages that are equal in both countries before free trade are now higher in the specialised country. Therefore, labour will move to the country with higher wage. As the bigger economy, the United States hires Mexican migrants and specialises in labour intensive production thus benefits from decreasing marginal costs as production goes up. As the industry is expanding, demand for Mexican employees increases to fulfil the increasing production which contributes to higher rate of migration. At the same time, US workers in manufacturing industry lose their jobs to Mexican migrants. This suggests that trade and migration are complements as trade fosters migration.

Acevedo and Espenshade (1992) stated in their paper that in general, as two economies become more integrated and interdependent, the volume of migration between them grows (Massey, 1988). It is predicted that migratory pressures will increase because the presence of free trade clearly increases the interdependence of the member countries' economies. Supported by Del Rio and Thorwarth (2009) empirical work, they found that trade has a significant positive effect on illegal migration. Based on the results, the influx of

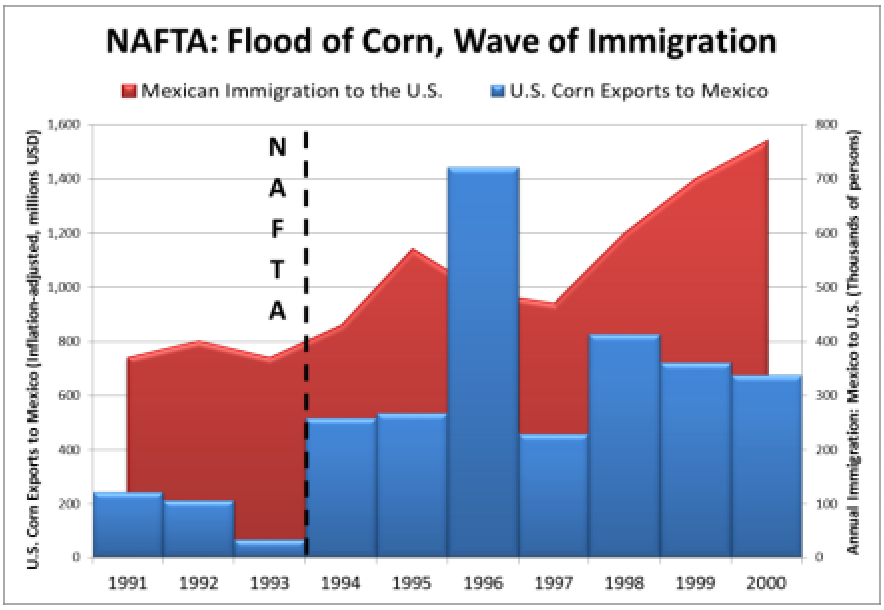
[4] Morrow, J. (2016) EC 367 International Trade, Lecture 3: "Specific Factors & Income Distribution".

illegal migrants will rise up to 71 000 for every one billion US Dollars increase in the volume of trade between Mexico and the United States.

In the context of NAFTA, Mexican economy is negatively affected by the implementation of the treaty especially the agricultural industry. Crop production in Mexico is hit by heavy losses because the market is taken over by the United States production. Corn produced by small Mexican farmers has to compete with corn produced by huge US producers which receive large subsidies from the United States. With the price of corn being very low, Mexican farmers lose their jobs as they cannot afford to grow corn and tend to migrate to the United States to find jobs. The workers in the labour intensive sector in Mexico are laid off after the labour intensive production in Mexico fails to compete with the capital intensive production in the US, increasing migratory pressure according to Martin and Taylor (as cited in Del Rio & Thorwarth, 2009, p.128).

As can be seen in Figure 1, US corn exports to Mexico increase dramatically after NAFTA in 1994 and skyrocket until more than 1400 million USD in 1996. Also, Mexican immigration to the US shows a higher level during the period after NAFTA compared to before the treaty was implemented and continues to increase after a slight fall between 1995 and 1997. Agricultural exports to Mexico more than doubled during the NAFTA years, from 4.6 to 9.8 billion USD annually[5]. Figure 2 illustrates both number of Mexican immigrants and their share of the total U.S. immigrant population share a similar trend and soar since 1960 onwards. More recently, however, they seem to show some signs of levelling off.

[5] Bacon, D. (2014). *Globalization and NAFTA Caused Migration From Mexico*. Retrieved December 28, 2016, from http://www.politicalresearch.org/2014/10/11/globalization-and-nafta-caused-migration-from-mexico/#sthash.OiG0hytZ.dpbs



Source for corn exports: U.S. International Trade Commission, “Interactive Tariff and Trade Dataweb,” 2013. Source for immigration: Jeffrey Passel, D’Vera Cohn, and Ana Gonzalez-Barrera, “Net Migration from Mexico Falls to Zero – and Perhaps Less,” Pew Research Center, April 23, 2012.

Figure 1[6] US corn exports to Mexico and annual Mexican immigration to the United States

[6] Political Hotwire. (anon.2016) *Discussion about NAFTA and MEXICAN Immigration.* Retrieved October 25, 2016, from http://politicalhotwire.com/political-discussion/150666-discussion-about-nafta-mexican-immigration-3.html

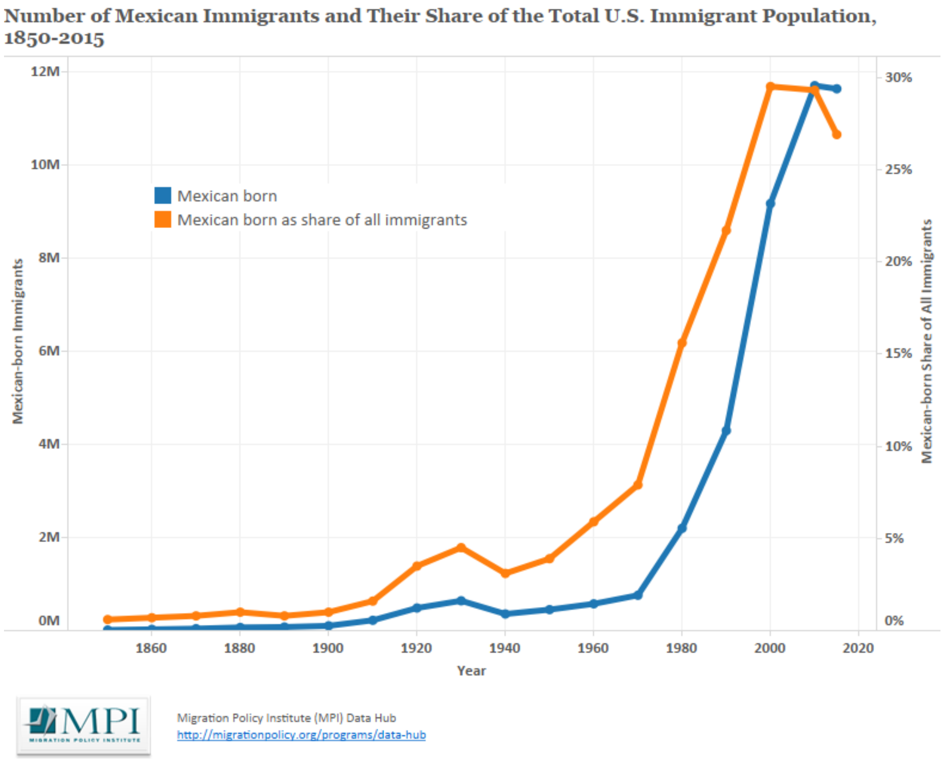


Figure 2[7]

TRADE AND MIGRATION AS SUBSTITUTES

Despite the popular view of trade and migration being complements are widely supported by theoretical and empirical works, it is not impossible that trade and migration are substitutes and move in the opposite directions.

If we analyse the relationship between trade and migration using the traditional theory of Hecksher-Ohlin model as Mundell (1957) did, we can see how liberalised trade can be a perfect substitute to factor movements. In the model, the two trading countries are assumed to have the same technology which means each economy has a comparative advantage in producing the good that relatively intensively uses factors they have. They are also assumed to have the same tastes which means given they are trading two goods; a labour-intensive

[7] Migration Policy Institute (MPI) Data Hub. (Batalova, J. n.d.) *Mexican-Born Population Over Time, 1850-Present.* Retrieved on October 25, 2016, from http://www.migrationpolicy.org/programs/data-hub/charts/mexican-born-population-over-time?width=1000&height=850&iframe=true

good, and a capital intensive good, each economy will consume the labour-intensive good to the capital-intensive good in the same ratio when faced with the same relative price of the labour-intensive good under free trade[8]. There will be a convergence of relative prices as the relative price of the labour-intensive good increases in the relatively labour abundant country and falls in the relatively labour scarce country.

The Hecksher-Ohlin theorem states, the economy that has a comparative advantage will export goods that are relatively intensive in using its relatively abundant factors of production. Applying Samuelson's Factor Price Equalisation Theorem, the factors of production move indirectly from one country to the other, because they are embodied in the traded goods even though the factors do not move physically[9]. Therefore, trade liberalisation and factor mobility are perfect substitutes.

Trade and migration might also be substitutes in the long run. This is what policy makers believe by enforcing NAFTA. Before NAFTA, the United States were facing Mexican migrant inflow due to large economic differentials which include wage and unemployment between Mexico and the United States. Therefore, NAFTA was signed as a measure to control the flow. The idea was that in the long run, NAFTA is anticipated to increase Mexico's economy, creating vast amount of job opportunities thus providing higher income as liberalised trade promotes economic development. The increasing demand of labour in Mexico to cope with the expanding economy will strengthen pull factors of migration flow and reduce Mexican workers' incentive to leave the country. The narrowing of wage and unemployment gaps between those countries are predicted to reduce migration. In this case, trade liberalisation and migration are substitutes as trade mitigates migration.

[8] Morrow, J. (2016) EC 367 International Trade, Lecture 4: "Resources and Trade: Hecksher-Ohlin-(Vanek)".
[9] According to Razin and Sadka (2001) with the Samuelson's Factor Price Equalisation idea coming from Feenstra (2004) (as cited in Del Rio & Thorwarth, 2009, p. 112)

Looking into an empirical work by Karamera, Oguledo and Davis (2000), migrant flows into the United States and income of origin countries has a significantly negative effect which implies that sustained economic development of the origin countries, Mexico in this case, leads to a decrease in migration flows to the United States. On the other hand, migrant flows and income seems to have no significant effect for the case of Canada.

However, there are few argument points that can be discussed. Factor Price Equalisation Model assumes that trading countries produce homogeneous goods ignoring the fact that this may not always be the case as countries may produce different goods if their factor ratios radically differ. Another assumption of countries have the same technology can also be argued because different technologies could affect factor productivities thus affecting wages and rates paid to the factors. Also, it ignores trade barriers and transportation costs, which may prevent factor prices from equalising[10]. Del Rio and Thorwarth (2009) in their paper, empirically rejected the classical Hecksher-Ohlin approach of proposing that trade and migration are substitutes as their research give more evidence supporting the complementary relationship.

CONCLUSION

Since 1994, NAFTA has been an ideal event to examine and study the relationship between trade and migration and to what extend the theoretical trade models are relevant in this context, as discussed in this essay. First and foremost, the analysis covers the case which liberalised trade is a complement to migration. Analysing the relationship theoretically, the trade concepts of increasing returns to scale and different technologies show that trade and migration move in the same direction. The complementary relationship is supported by

[10] Morrow, J. (2016) EC 367 International Trade, Lecture 4: "Resources and Trade: Heckshe-Ohlin-(Vanek)".

empirical research included in the analysis. Also, NAFTA provides interminable evidence of trade and migration being complements in real world situation which enhances this relationship.

On the contrary, the classical Hecksher-Ohlin and Factor Price Equalisation model illustrate a substitute relationship between liberalised trade and migration. This relationship is also possible in the long run analysis of NAFTA with a review of an empirical research. However, there are few assumptions in Factor Price Equalisation Model used to explain trade and migration brought up questions and arguments to the substitute relationship. Furthermore, there is lack of evidence of trade and migration being substitutes in the case of NAFTA.

It can be concluded that there is an ambiguous relationship between trade liberalisation and migration. In my opinion, since the implementation of NAFTA, it is clear that it has been providing numerous evidence towards the complementary relationship. Although it has been two decades, NAFTA did not provide many evidence of substitute relationship between trade and migration as anticipated by the long run analysis. However, I personally think that we need to consider the possibility that we might still be in the short run period and have not reached the long run period yet. Two decades might not be long enough to start analysing and observing the impact of NAFTA from the long run perspective. The question to be addressed is how long is the long run?

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