

The Untold Stories Of Trade And Migration: Examining Interregional

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Abstract

Numerous studies demonstrate that trade patterns are significantly influenced by the population's national origin structure. The link may be weaker for emerging nations since their economies are undergoing fundamental changes. However, migration policy may be developed more effectively to assist the nation's economic growth if it takes into account the influence of migratory flows on commerce. We investigate the idea that, compared to developed nations, emerging countries see a reduced influence from migratory movements on international commerce. We use quarterly data from 1990 to 2003 on Bolivia's imports, exports, and migration. In accordance with earlier research, we use the gravity equation approach. An attrition coefficient for migrant stocks and inflows is the basis for the estimate of the migration data. We account for GDP in addition to the standard trade cost factors of pricing, distance, and trading partner proximity. We contrast our estimate findings with those of earlier research on wealthy nations. The format of the paper is as follows. Based on previously published research, the relationship between commerce and migration is first examined. We then go on to discuss trade and migration trends in India. Third, we describe the data and techniques that were employed. Lastly, we provide the estimate findings and draw some inferences.

Keywords: Trade, Migration, Interregional Exchange, Global Commerce, Cultural Interaction, Economic History.

1. INTRODUCTION

Numerous studies demonstrate that trade patterns are significantly influenced by the population's national origin structure (see below). The link may be weaker for emerging nations since their economies are undergoing fundamental changes. However, migration policy may be developed more effectively to assist the nation's economic growth if it takes into account the influence of migratory flows on commerce [1].

We investigate the idea that, compared to developed nations, emerging countries see a reduced influence from migratory movements on international commerce. We use quarterly data from 1990 to 2003 on India's imports, exports, and migration. In accordance with earlier research, we use the gravity equation approach. An attrition coefficient for migrant stocks and inflows is the basis for the estimate of the migration data. We account for GDP in addition to the standard trade cost factors of pricing, distance, and trading partner proximity. We contrast our estimate findings with those of earlier research on wealthy nations.

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commerce and migration. Third, we describe the data and techniques that were employed. Lastly, we provide the estimate findings and draw some inferences [2].

1.2. Trade and migration linkages: theory and empirical evidence

When it comes to commerce, the impact of migration is better understood than the reverse. "Bilateral trade flows and immigration have a robust and positive relationship,"

1. Three things distinguish immigrants: 1. their greater understanding of market prospects;
2. their privileged access to those opportunities;
3. their preferences for certain foreign product kinds, including those from their home nations.

Numerous studies demonstrate that transaction expenses as well as transportation costs are barriers to trade. Immigrants could act as middlemen in commerce.

2. LITERATURE REVIEW

Hu, D. (2002) [3] This study explores many policy implications and builds a spatial agglomeration model to explain China's growing regional imbalance, drawing inspiration from the country's experience. The model indicates that the widening income disparity between China's hinterland and coastal regions might be caused by strengthening trade conditions and rising rural-to-urban worker mobility. The coast, which has a geographic advantage in global commerce, becomes the starting point for industrial agglomeration, and the positive feedback loop from growing returns to scale strengthens its leadership. Rather than interregional migration, the industrial agglomeration along the coast depends on intraregional rural-to-urban movement for its labor supply. The industrial agglomeration causes the income gap between the hinterland and the coast to widen. The increased expense of transportation in international commerce is the interior's geographical disadvantage. But according to the model, improving domestic accessibility may actually worsen conditions in the interior.

Moshiri, S., & Moghaddam, M. B. (2018) [4] Shocks to the price of oil have different repercussions on different nations. The supply side of the economy in nations that import oil and the demand side of the economy in nations that export oil are the main targets of the shocks. Nonetheless, the literature has extensively examined the direct consequences of oil price shocks, but they also have spillover effects via labor migration and commerce. Multi-country studies often overlook heterogeneities and spillover effects, making it difficult to adequately capture the variations in political systems and institutions across nations. In this work, we examine the diverse impacts of oil price shocks on the Canadian economy, which consists of independent provinces that import and export oil under a federal system with identical institutions, monetary policies, and political structures. Moreover, labor mobility and commerce occur between provinces without major obstacles that are seen in international relations. In order to evaluate the dynamic reactions of provinces to shocks in oil prices while taking into account spillover effects and provincial heterogeneities, we built up a panel VAR model. We also look at the differences between the pre- and post-2000 eras and test for asymmetric impacts of positive and negative oil price shocks on provinces. Unlike the findings commonly reported for specific nations or areas, the data show that the oil price shocks had

favorable effects on both oil-exporting and oil-importing provinces. The impacts are stronger in the post-2000 era and asymmetric for both positive and negative oil price shocks.

Schwarm, W. R., et.al., (2006) [5] A thorough investigation of regional models is hampered by the absence of consistent, trustworthy data on interregional commerce and interindustry interactions. This project uses preliminary data on interregional exports and an interregional accounting framework to construct and evaluate interindustry transaction flows in a national system of economic regions. Single-state SAMs are built as part of the process for creating an interregional Commodity by Industry Flow matrix for the US. The Bureau of Transportation Statistics publishes data from the Commodity Flow Survey, which is the basis for the estimation of the interregional flows between states. The estimated interregional SAM is adjusted to ensure the integrity of intraregional and system-wide national accounts. The findings of exercises evaluating the reliability of the resultant interregional trade-flow statistics are presented in this study. The exercises included a variety of data sources, including the CFS, the FAFD, and S&P/DRI regional estimates. A US interregional framework that describes movements between and between the 50 states as well as the District of Colombia serves as the model under examination.

Mitchneck, B. A. (2021) [6] Due to the existing mismatch between the locations of labor, natural resources, and industrial capacity in the USSR, interregional migration leads to a regional redistribution of labor. This research examines the topographical and economic factors that influence migrants' choice of destination between 1968 and 1985. The relative contributions of economic and quality-of-life variables, as well as the gravity variables (population density and distance), are given special attention. It is acceptable to use Western ideas to the analysis of migration in the Soviet environment, as shown by the statistically significant findings for the gravity and economic factors.

Cross-Border migration and trade patterns in India

1.1. Nation structure and migration flows in India

India's internal migration flows and national structure are closely linked to the country's cross-border migration and trade trends. India borders a number of nations internationally, including Bangladesh, Myanmar, China, Nepal, Bhutan, and Pakistan. Migration trends and trade dynamics have traditionally been impacted by this physical closeness. The federal structure of the country, which is made up of union territories and states, is essential to controlling cross-border migration [7]. Every bordering state has distinct societal and economic connections with neighbouring nations, which influence cross-border migration. The difficulty of cross-border contacts is exacerbated by the variety of languages, cultures, and customs found in these locations. A number of variables, such as historical links, geopolitical changes, and economic possibilities, affect the migration patterns beyond India's borders. For example, there is often a large flow of individuals involved in trade and business in border areas. These areas' distinct identities are shaped by a unique combination of influences resulting from informal commerce and cultural contacts along boundaries. Cross-border migration and trade patterns go hand in hand, with people and things moving across borders fostering economic interdependence. Commodity flows are impacted by border trade agreements and policies between India and its

neighbors, which promote economic cooperation and regional growth. Smoother trade operations are made possible by increased infrastructure development and improved connection along borders.

Furthermore, common ethnic and family links have an impact on cross-border migration in certain areas, which results in the emergence of transnational communities. Social integration and cross-cultural interactions are significantly impacted by this interconnection. India must find a balance between fostering commerce, controlling cross-border migration, and preserving geopolitical stability. In the framework of India's cross-border interactions, government policies, diplomatic initiatives, and foreign partnerships are crucial in determining the dynamics of nation formation, migratory flows, and trade patterns. Understanding how these interrelated factors are changing requires ongoing examination due to ongoing changes and geopolitical events [8].

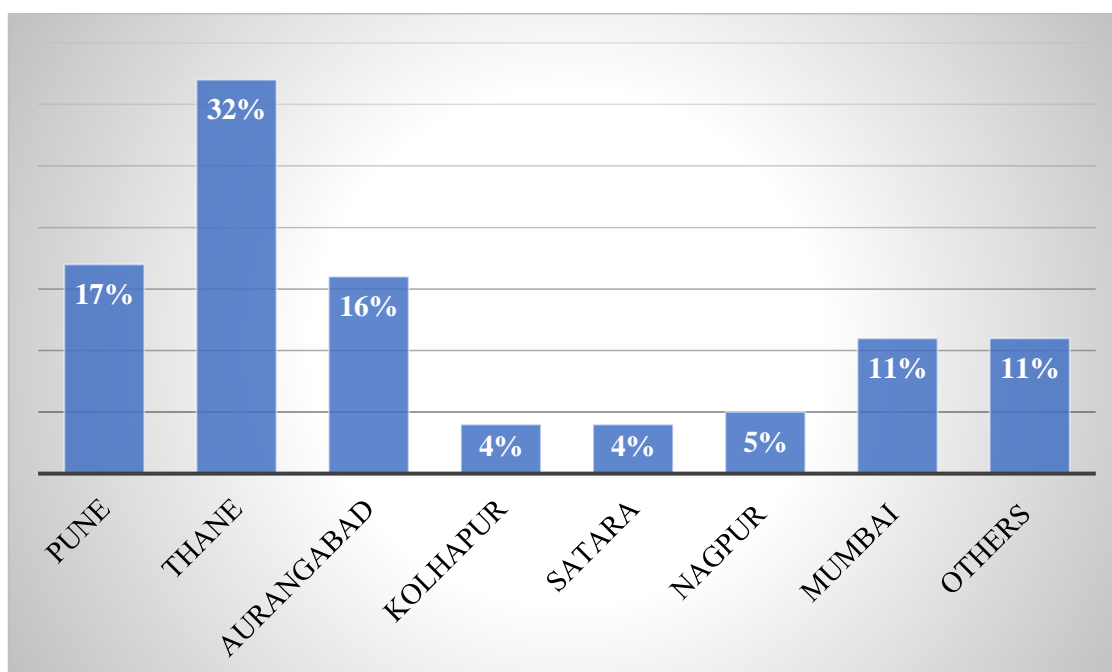


Figure 1: Population structure of Indian immigrants, 2001.

the distribution of a specific variable with the accompanying percentage share for each district in Maharashtra, India. With 32%, Thane has the highest proportion, followed by Aurangabad at 16% and Pune at 17%. Kolhapur and Satara each have a 4% share, while Mumbai and Nagpur give 11% each. Other districts are jointly responsible for the remaining 11%. This distribution suggests geographical differences in the occurrence or distribution of the phenomena under study throughout different Maharashtra districts, with a notable concentration of the variable in Thane.

3.2 Trade patterns in India

The western Indian state of Maharashtra's trade patterns show a strong and varied economic environment. With important metropolises like Pune and Mumbai spearheading economic

activity, Maharashtra plays a significant role in the nation's commerce. The state imports goods like electronics and gasoline and exports a range of goods, including textiles, equipment, and chemicals. Mumbai is an important financial centre that is essential to the facilitation of global commerce [9]. Maharashtra's position in the national and international commercial arenas may be attributed to its strategic location, well-developed infrastructure, and aggressive policies. The state's trade patterns highlight how important it is to the development of India's economic relationships and establish Maharashtra as a major participant in the ever-changing world of international trade.

India's trade patterns are defined by a dynamic and diversified environment, which is indicative of the nation's prominence in the global economy. India engages in a broad spectrum of trade operations including commodities and services, with a particular focus on local and international markets [10]. The nation participates in both bilateral and international trade agreements, promoting business alliances and bolstering its general economic expansion. India's import and export trends reveal a variety of goods focused on services, industry, and agriculture. Interestingly, the nation exports a large amount of textiles, medicines, information technology services, and other manufactured items. In order to fulfill local demand, India imports machinery, electronics, precious metals, and petroleum and crude oil. Notable is the regional distribution of trading partners, with North America, Europe, and Asia being the most common regions. Furthermore, India's participation in regional commercial blocs, such the Association of Southeast Asian Nations (ASEAN) and the South Asian Association for Regional Cooperation (SAARC), highlights its dedication to promoting regional economic cooperation. Trade patterns are influenced by laws, regulations, and world economic trends. Programs such as "Make in India" and "Digital India" are designed to increase the country's manufacturing and technology capacities, which will affect the export composition. Additionally, the liberalization of trade laws has improved India's integration into the world supply chain and allowed for a rise in foreign direct investment. Trade dynamics may be impacted by issues including trade imbalances, volatile commodity prices, and geopolitical unpredictability. However, India is well-positioned to overcome these obstacles and go on playing a significant role in the world of international commerce because to its resilience and continuous reforms. The future course of India's trade patterns will be shaped by the way the world's trade is changing and how the country responds to new developments.

As one of the most important states in terms of economy in India, Maharashtra has a wide range of export and import trade partners. Major export markets for the state are often found in North America, Europe, and Asia [11]. Maharashtra has historically relied on the export of goods including textiles, machinery, and chemicals to the United States, the United Arab Emirates, China, and European nations.

Maharashtra often imports goods from nations with abundant natural resources or highly developed technical capacities. Middle Eastern nations like Saudi Arabia and the United Arab Emirates are significant importers of petroleum. Imports of machinery and electronics may originate from the US, China, or Japan. commerce partner details may change depending on the state of the economy, the dynamics of international commerce, and governmental

regulations. The most recent reports from official trade and economic sources should be consulted for the most accurate and current information.

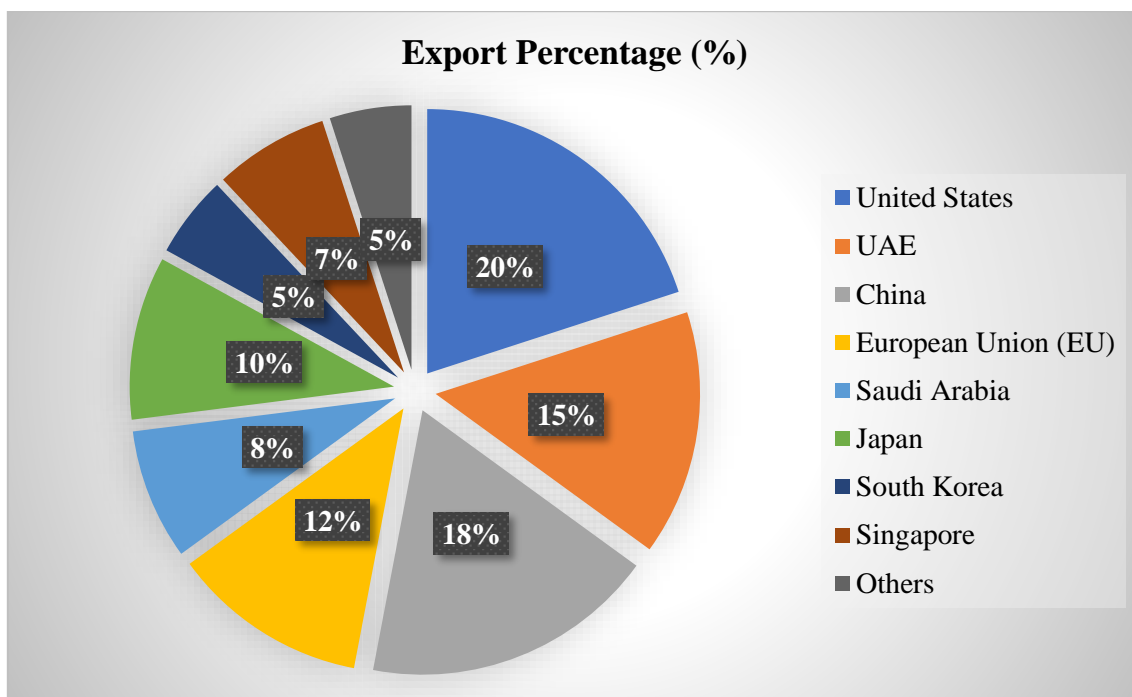


Figure 2: Partners for India's imports and exports (right panel) (Maharashtra).

4 ESTIMATION RESULTS

It's important to identify the various samples used in the estimates when comparing regression results across three distinct model specifications. The availability of data for emigrants is the reason for the differences in the samples [12]. The models described above provide findings that are generally in line with predictions when estimated using pooled data. With the exception of the adjacency variable in the intra-industry model with the emigration variable, control variables, GDP, distance, and adjacency measures are statistically significant and have predicted directions of influence (sign of coefficient) (see Table 1) [13].

Table 1: Estimate of the gravity equation.

| Explanatory Variables | Number of the model estimated with the respective endogenous variable | | | | | |
|-----------------------|---|----------------------|----------------------|----------------------|--------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | EXP | IMP | EXP | IMP | GL | GL |
| Constant | 35.700*** (2.546) | 16.540*** (2.340) | 37.700*** (2.940) | 18.800*** (2.300) | 0.180* (0.100) | 0.150*** (0.035) |
| GDP | 1.920*** (0.089) | 1.380*** (0.076) | 1.640*** (0.150) | 0.120*** (0.100) | 0.020** (0.007) | 0.010*** (0.006) |

| | | | | | | |
|---------------------|----------------------|----------------------|----------------------|----------------------|---------------------|----------------------|
| CPIM | -0.545*** (0.159) | -0.450*** (0.120) | -0.470*** (0.150) | -0.379*** (0.120) | -0.015* (0.008) | -0.017** (0.008) |
| DIST | -6.600*** (0.465) | -3.009*** (0.146) | -6.440*** (0.140) | -2.770*** (0.350) | -0.50*** (0.030) | -0.160*** (0.045) |
| ADJ | -4.657*** (0.500) | -0.800*** (0.401) | -4.990*** (0.455) | -1.300*** (0.411) | -0.034* (0.025) | -0.045*** (0.006) |
| IMMI | (0.025) | (0.050) | | | | (0.05) |
| EMI | | | 0.031*** | 0.036*** | 0.039*** | |
| R ² | 0.750 | 0.770 | 0.760 | 0.780 | | |
| No. od Observations | 190 | 190 | 190 | 190 | 190 | 360 |

Note: Significant at (*) 10 percent (**) 5 percent (***) 1 percent, standard deviations in brackets

The numbers (1) through (6) are the outcomes of regression models that estimated the influence of various explanatory variables on exports (EXP) and imports (IMP) under various specifications. Variables including GDP, CPIM, ADJ (adjacency), DIST (distance), EMI (emigration), and IMMI (immigration) are included in the models [14]. Asterisk-designated significant coefficients show the direction and magnitude of the factors' effects on trade. Interestingly, GDP positively impacts imports as well as exports, highlighting its significance in the dynamics of trade. Cost, Insurance, and Freight (CPIM) has a negative influence, indicating that it contributes to trade costs. The predicted negative impacts on adjacency and distance variables also indicate the influence of geographical considerations. The importance of immigration (IMMI) and emigration (EMI) factors in influencing trade patterns is highlighted by their inclusion. The explanatory strength of the models and the sample sizes are shown, respectively, by the R² values and the number of observations [15].

5 CONCLUSION

The data shows how closely cross-border migration and trade trends in India are related. The federal structure of the country affects migratory patterns, and the distinct social and economic links that each bordering state has with its surrounding nations are a result of this. The intricacy of cross-border contacts is shaped by the variety of languages, cultures, and customs. The state's importance in India's economic landscape is highlighted by trade patterns, especially in Maharashtra, where important metropolitan centers are the main drivers of foreign trade. The significance of control factors in understanding trade patterns, especially the complex interplay between migration and commerce, is emphasized by the econometric study. Maintaining geopolitical stability, fostering commerce, and balancing cross-border migration are all

essential to India's continued participation in the world economy. To effectively navigate these interrelated factors, ongoing evaluation and adaptation to changing global dynamics are needed.

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