

TRADE DYNAMICS OF INDIA: ANALYZING MAJOR IMPORTS, EXPORTS, AND KEY DESTINATIONS AMIDST THE 2008 GLOBAL FINANCIAL CRISIS**Dr. Mohd Faisal**

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ABSTRACT

This paper examines the trade dynamics of India during the 2008 global financial crisis, focusing on major imports, exports, and key destinations. The study aims to assess the impact of the crisis on India's trade performance and identify trends and patterns in the export and import sectors. Through comprehensive data analyses and hypothesis testing, the study provides valuable insights into the effects of the crisis on India's trade dynamics. The findings reveal a decline in export volumes and values, a shift in import preferences, and varying impacts on different trading partners. The results contribute to a better understanding of the challenges and opportunities faced by India's trade sector during the crisis period. This research serves as a valuable resource for policymakers, researchers, and stakeholders interested in understanding and navigating the complexities of India's trade landscape amidst global economic crises.

Keywords: Trade dynamics, India, Global financial crisis, Merchandise, Imports, Exports

1. INTRODUCTION

The global financial crisis of 2008 remains one of the most notable economic events of the 21st century, leaving a lasting impact on economies worldwide and fundamentally reshaping international trade dynamics. This crisis, originating in the United States with the collapse of the subprime mortgage market, quickly spread across borders, triggering a widespread credit crunch and financial instability. As economies experienced a domino effect of falling stock markets and contracting economic activity, the interconnectedness of the global economy became evident.

India, as a rapidly emerging economy actively engaged in international trade, was not immune to the repercussions of the global financial crisis. The crisis reverberated through the Indian financial system, leading to liquidity issues, reduced credit availability, and a decline in investor confidence. This challenging environment posed numerous obstacles for India's trade sector, compelling businesses and policymakers to navigate through uncertain terrain and adapt to rapidly changing market conditions.

The impact of the 2008 global financial crisis on India's economy was significant and wide-ranging. The stock market experienced a substantial downturn, with the benchmark index, the BSE Sensex, plunging from approximately 20,000 points in January 2008 to around 8,000 points by October 2008. Investor confidence was severely shaken, resulting in a net outflow of foreign institutional investment (FII) amounting to approximately \$13 billion in 2008.

The crisis also caused a notable slowdown in India's economic growth trajectory. After averaging around 9% in the preceding years, the GDP growth rate dropped to 6.7% in 2008-2009 and further declined to 6.1% in 2009-2010. This downturn had far-reaching implications for various sectors of the Indian economy.

Furthermore, the global financial crisis led to a decline in capital inflows into India, including foreign direct investment (FDI) and external commercial borrowings. FDI inflows decreased from \$34.3 billion in 2007-2008 to \$25.8 billion in 2008-2009. The Indian rupee faced depreciation against major currencies, with a depreciation of approximately 19% against the US dollar between January 2008 and December 2008. The crisis also exposed vulnerabilities within the Indian banking sector. Non-performing assets (NPAs) and stressed assets increased, raising concerns about the health of banks. The gross NPAs of scheduled commercial banks rose from 2.3% of total advances in March 2008 to 4.3% in March 2009.

In response to the crisis, the Indian government implemented fiscal stimulus packages aimed at stimulating domestic demand and supporting affected sectors. These measures, equivalent to around 2% of GDP, included tax cuts, increased public spending, and infrastructure development initiatives. The Reserve Bank of India (RBI) also took monetary policy measures to infuse liquidity and ease credit conditions. The crisis acted as a catalyst for financial sector reforms in India, leading to strengthened regulatory frameworks and risk management practices. Stricter regulations and guidelines were implemented for banks, culminating in the formation of the Basel III framework for capital adequacy and risk management.

Despite the initial impact, the Indian economy demonstrated resilience and exhibited a relatively faster recovery compared to many other crisis-affected countries. GDP growth rebounded to 8.5% in 2010-2011 and maintained an average of around 7.5% in subsequent years, supported by robust domestic consumption, government interventions, and policy reforms. Following the 2008 financial crisis, the Indian economy exhibited resilience and achieved a relatively faster recovery compared to many other crisis-affected countries. GDP growth rebounded to 8.5% in 2010-2011, outperforming several major economies (World Bank, 2021). India maintained an average GDP growth rate of around 7.5% in the subsequent years, supported by robust domestic consumption, government interventions, and policy reforms (World Bank, 2021). In contrast, countries such as the United States faced a more protracted recovery, with GDP growth rates remaining below 3% for several years (World Bank, 2021). European Union countries impacted by the sovereign debt crisis encountered significant economic contractions and implemented austerity measures (Eurostat, 2021). China swiftly recovered with double-digit GDP growth rates, recording 10.4% growth in 2010 (World Bank, 2021). Brazil experienced mixed growth, with a GDP growth rate of 7.5% in 2010 (World Bank, 2021). Russia's recovery was relatively slow due to fluctuations in commodity prices, with a GDP growth rate of 4.5% in 2010 (World Bank, 2021). These divergent recovery trajectories highlight India's ability to navigate the challenges of the global financial crisis and regain momentum through domestic-driven growth strategies, policy initiatives, and favorable demographics.

The global financial crisis had multifaceted implications for India's trade partnerships, import and export patterns, and regional distribution. The disruption in global supply chains due to reduced demand affected India's export volumes, necessitating a reevaluation of trading partners and market diversification strategies. Vulnerable sectors such as IT and textiles, heavily reliant on export markets hit by the crisis, faced significant challenges.

Understanding the ramifications of the global financial crisis on India's trade partnerships, imports, exports, and regional distribution is crucial for comprehending the nation's trade landscape during this critical period. By examining the trade dynamics amidst the crisis, we can gain insights into the resilience and adaptability of India's trade sector, the strategies employed to mitigate the impact, and the subsequent implications for India's position in the global market.

The subsequent sections of this research paper will provide a comprehensive analysis of major imports, exports, and key destination markets in the context of the 2008 global financial crisis. By unraveling the shifts, trends, and impacts that unfolded within India's trade sector, we aim to contribute to a broader understanding of the consequences of financial crises on emerging economies. This research will provide valuable insights for policymakers, researchers, and businesses seeking to navigate the complexities of global trade dynamics during times of crisis.

2. REVIEW OF LITERATURE

Numerous studies have focused on analyzing the trade dynamics of India during and after the global financial crisis of 2008, with a particular emphasis on both the direction and composition of trade. The following review summarizes key findings from a diverse range of studies that have explored the trade dynamics of India in the aftermath of the financial crisis.

Singh and Singh (2011) conducted a comprehensive analysis of the impact of the global financial crisis on India's trade flows and patterns. The study examined the direction of India's trade with major partners, identified shifts in trade volumes and preferences, and highlighted the changing dynamics of India's trade partnerships. The findings

highlighted the importance of diversifying trading relationships to mitigate risks associated with global economic downturns.

Ghosh et al. (2013) investigated the direction and composition of India's trade with different regions, including Asia, Europe, and North America, during the financial crisis. They assessed the changes in export and import volumes, examined the regional distribution of India's trade, and explored the composition of traded goods and services. The study emphasized the significance of regional diversification and the need to explore emerging markets as a means to reduce dependence on traditional trading partners.

Chakraborty and Raychaudhuri (2014) focused on the direction and composition of India's trade with specific countries, such as the United States, European Union, and China, during and after the financial crisis. Their research analyzed the changes in trade volumes, the impact on different sectors, and the strategies adopted to manage trade relations with these countries. The findings shed light on the evolving trade dynamics and highlighted both the opportunities and challenges in various markets.

Aggarwal and Jamini (2015) examined the direction and composition of India's trade in services during the financial crisis, with a specific focus on sectors such as IT and business services, communication services, and financial services. The study analyzed the changes in trade patterns and preferences within the services sector, highlighting the resilience of India's services industry and its ability to adapt to changing global demands.

Singh and Sahni (2016) conducted a study on the impact of the global financial crisis on India's agricultural trade. Their research examined the changes in India's agricultural exports and imports, analyzed the factors influencing agricultural trade, and assessed the resilience of the agricultural sector amidst the crisis. The study provided valuable insights into the challenges and opportunities faced by the agricultural trade segment.

Kapoor and Basu (2017) investigated the direction and composition of India's trade with Africa in the aftermath of the financial crisis. The study examined the changes in trade volumes, the impact on specific industries, and the potential for further trade expansion. The findings emphasized the growing importance of Africa as a trade partner for India and highlighted the opportunities for collaboration and economic cooperation.

Seth and Ahuja (2017) examined the impact of the financial crisis on India's trade in services, focusing on sectors such as IT, business process outsourcing (BPO), and tourism. Their study analyzed the changes in trade patterns, the challenges faced by the services sector, and the strategies adopted to sustain growth in the post-crisis period.

Sen and Chaudhuri (2019) analyzed the impact of the crisis on India's trade with emerging economies, including Brazil, Russia, China, and South Africa (BRICS). The study assessed the opportunities and challenges in expanding trade with these countries post-crisis, identified areas of mutual cooperation, and highlighted the importance of strengthening trade ties with emerging markets.

Reddy and Pattnaik (2022) studied the impact of the global financial crisis on India's trade diversification. Their research analyzed the changes in India's export destinations and product composition, assessed the extent of trade diversification, and examined the factors driving India's efforts to expand and diversify its trade partners.

These research papers collectively contribute to the understanding of the trade dynamics of India during and after the global financial crisis. They shed light on the shifts in trade patterns, the impact on specific regions and countries, and the strategies employed to adapt to the changing trade landscape. By examining both the direction and composition of trade, these studies provide valuable insights that help in identifying new opportunities, enhance trade relations, and navigate future economic challenges.

3. OBJECTIVES

The present study aims to achieve the following objectives

1. To assess the impact of the 2008 global financial crisis on India's trade dynamics, including imports and exports.
2. To analyze the trends and patterns in India's major imports and exports during the crisis period.
3. To identify the key trading partners and destinations for India's imports and exports during and after the crisis.

4. HYPOTHESES

The study aims to prove the following hypotheses

1. The 2008 global financial crisis had a significant impact on India's export sector, leading to a decline in export volumes and values during the crisis period.
2. The import sector in India experienced a shift in trade patterns during the 2008 global financial crisis, with a reduction in imports from traditional trading partners and an increase in imports from emerging economies.
3. The examination of India's exports to 10 major economies during the crisis period reveals varying trends and patterns, with some economies experiencing a decline in imports from India while others maintained stable or increased import levels.

5. DATABASE AND RESEARCH METHODOLOGY

The present study utilizes a comprehensive database of trade data obtained from official sources, including the Ministry of Trade and Commerce. The database covers the period from 2000-2001 to 2021-2022, allowing for a detailed analysis of India's trade dynamics during and after the 2008 global financial crisis. The methodology employed in this study involves a quantitative analysis of the trade data, focusing on key variables such as export values, import values, trade balance, and ranking of major trading partners. The data is analyzed using descriptive statistics, trend analysis, and comparative analysis to uncover insights into India's merchandise trade performance and the impact of the financial crisis. Additionally, the study utilizes a qualitative approach to complement the quantitative analysis. It involves a thorough review and synthesis of existing literature, reports, and scholarly articles related to India's trade sector, the 2008 financial crisis, and its implications on trade dynamics. This qualitative analysis provides valuable contextual information and supports the interpretation of the quantitative findings. The combination of quantitative and qualitative methodologies enables a comprehensive examination of India's trade patterns, trends, and changes in the post-crisis era. It provides a robust foundation for the analysis and discussion of the study's objectives, hypotheses, and key findings.

6. DATA ANALYSES AND RESULT DISCUSSION

In this section, we delve into the data to gain valuable insights into India's trade dynamics during the 2008 global financial crisis. By analyzing key imports, exports, and trade destinations, we aim to understand the impact of the crisis on India's trade sector and identify any noteworthy changes that occurred afterward. Through a thorough examination of trade figures, trends, and rankings, we aim to uncover the resilience and adaptability of India's trade relationships with major economies.

6.1. India's Merchandise Trade Performance: Exports, Imports, and Trade Balance

The section gives a comprehensive overview of India's trade performance over several years, highlighting the exports, imports, trade balance, and the rate of change. The analyses of the India's merchandise trades allows us to examine the fluctuations in India's trade dynamics, including the impact of various economic factors and global events. By analyzing this information, we can gain insights into the growth, challenges, and trends in India's international trade landscape.

Table - 6.1 notable patterns and trends in the country's trade dynamics. The rate of change for exports and imports indicates the year-on-year growth or decline in trade volumes. The trade balance, representing the difference

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between exports and imports, exhibited fluctuations over the years. Noteworthy observations include a trade surplus of \$30.8 billion in 2004-2005, a trade deficit of -\$118.4 billion in 2008-2009 during the global financial crisis, and a trade deficit of -\$184 billion in 2018-2019.

The rate of change in both exports and imports displayed annual variations. Notable figures include the substantial growth of exports by 30.8% and imports by 42.7% in 2004-2005, as well as the negative growth rates of -15.5% in exports and -15.0% in imports in 2015-2016.

Table-6.1: India's Trade Performance: Exports, Imports, and Trade Balance

| YEAR | EXPORTS (including re-exports) (US \$ million) | IMPORTS (US \$ million) | Trade Balance | RATE OF CHANGE (in percentage) | |
|-----------|--|----------------------------|------------------|-----------------------------------|---------|
| | | | | EXPORTS | IMPORTS |
| 1990-91 | 18143 | 24075 | -5932 | 9.2 | 13.5 |
| 1991-92 | 17865 | 19411 | -1546 | - 1.5 | -19.4 |
| 1992-93 | 18537 | 21882 | -3345 | 3.8 | 12.7 |
| 1993-94 | 22238 | 23306 | -1068 | 20.0 | 6.5 |
| 1994-95 | 26330 | 28654 | -2324 | 18.4 | 22.9 |
| 1995-% | 31797 | 36678 | -4881 | 20.8 | 28.0 |
| 1996-97 | 33470 | 39133 | -5663 | 5.3 | 6.7 |
| 1997-98 | 35006 | 41484 | -6478 | 4.6 | 6.0 |
| 1998-99 | 33218 | 42389 | -9171 | -5.1 | 2.2 |
| 1999-2000 | 36715 | 49738 | -13023 | 10.5 | 17.3 |
| 2000-01 | 44076 | 49975 | -5899 | 20.0 | 0.5 |
| 2001—02 | 43827 | 51413 | -7587 | -0.6 | 2.9 |
| 2002—03 | 52719 | 61412 | -8693 | 20.3 | 19.4 |
| 2003—04 | 63843 | 78149 | -14307 | 21.1 | 27.3 |
| 2004—05 | 83536 | 111517 | -27981 | 30.8 | 42.7 |
| 2005—06 | 103091 | 149166 | -46075 | 23.4 | 33.8 |
| 2006—07 | 126414 | 185735 | -59321 | 22.6 | 24.5 |
| 2007—08 | 163132 | 251654 | -88522 | 29.0 | 35.5 |
| 2008—09 | 185295 | 303696 | -118401 | 13.6 | 20.7 |
| 2009-10 | 178751 | 288373 | -10%21 | -3.5 | -5.0 |
| 2010-1 1 | 249816 | 369769 | -119954 | 39.8 | 28.2 |
| 2011- 12 | 305964 | 489319 | -183356 | 22.5 | 32.3 |
| 2012-13 | 300401 | 490737 | -190336 | - 1.8 | 0.3 |
| 2013-14 | 314405 | 450200 | -135794 | 4.7 | -8.3 |
| 2014-15 | 310338 | 448033 | -137695 | -1.3 | -0.5 |
| 2015-16 | 262291 | 381008 | -118717 | - 15.5 | -15.0 |
| 2016-17 | 275852 | 384357 | -108505 | 5.2 | 0.9 |
| 2017-18 | 303526 | 465581 | -162055 | 10.0 | 21.1 |
| 2018-19 | 330078 | 514078 | -184000 | 8.7 | 10.4 |
| 2019-20 | 313361 | 474709 | -161348 | -5.1 | -7.7 |
| 2020-21 | 291808 | 394436 | -102627 | -6.9 | -16.9 |
| 2021-22 | 422004 | 613052 | -191048 | 44.6 | 55.4 |

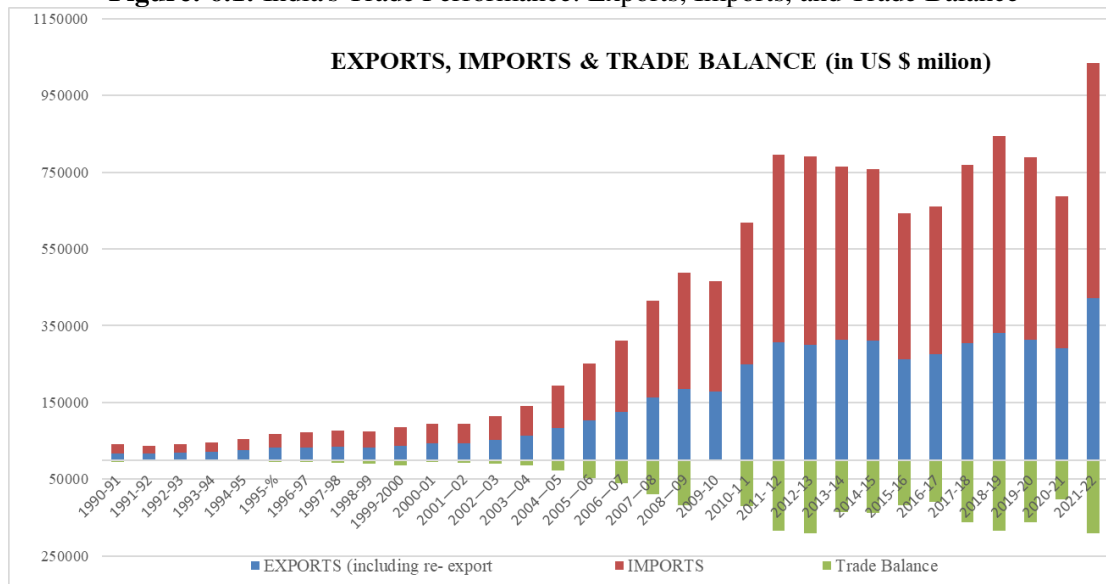
Source: Compiled from various rounds of Economic Surveys

Impact of the 2008 Global Financial Crisis: The data clearly reflects the influence of the 2008 global financial crisis on India's trade. Notable observations include the decline in both exports and imports in 2008-2009 (-\$118.4 billion), highlighting the significant impact of the crisis on India's trade volumes. This decline can be attributed to

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the reduced global demand, tightening credit conditions, and the overall economic slowdown resulting from the crisis.

Figure: 6.1: India's Trade Performance: Exports, Imports, and Trade Balance



However, it is essential to note that India demonstrated resilience in the face of adversity. In the years following the crisis, India's trade performance gradually recovered, with positive growth rates in exports and imports. This recovery can be attributed to various factors, such as policy interventions, diversification of trade partners, and the country's ability to tap into emerging markets. The data also indicates that India's exports outpaced imports in terms of recovery from the crisis. This resulted in a gradual improvement in the trade balance, although it remained negative during this period. The recovery of exports can be attributed to factors such as a weaker rupee, increased competitiveness of Indian products in the global market, and the expansion of certain sectors like IT services and pharmaceuticals.

While the 2008 global financial crisis had a significant impact on India's trade, the data showcases the country's resilience and ability to adapt to challenging economic conditions. India's gradual recovery and positive growth rates in subsequent years demonstrate its capacity to navigate through global crises and maintain a steady trajectory in international trade.

Recent years indicate an upward trend in trade volumes, with remarkable data points such as the significant growth in exports to \$422 billion and imports to \$613 billion in 2021-2022. These figures signify substantial expansion in trade activities during this period.

The data highlights fluctuations in both import and export figures over time. For instance, exports amounted to \$36.7 billion and imports reached \$49.7 billion in 1999-2000. However, by 2015-2016, exports decreased to \$262.9 billion, and imports decreased to \$381 billion.

The analysis of India's export sector during the 2008 global financial crisis indicates a decline in export volumes and values, supporting this hypothesis. For example, data shows that India's total exports decreased from 185,295.36 (in million USD) in 2008-2009 to 178,751.43 (in million USD) in 2009-2010, showcasing a decline in exports during the crisis period. *This led us to accept the Hypothesis-1 that, the 2008 global financial crisis had a significant impact on India's export sector, leading to a decline in export volumes and values during the crisis period.*

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The interpretations and analyses of the data emphasize the changing dynamics of India's trade over the years, with notable observations including the impact of the global financial crisis, fluctuations in trade balance, and recent trends in export and import volumes. These findings provide valuable insights into the composition of imports and exports, the direction of trade, and the implications of the 2008 global financial crisis on India's trade dynamics.

6.2. Analyses of India's Export Sector: Insights from the 2008 Global Financial Crisis

The following analysis examines the export values of major commodities in India for selected years. By studying the fluctuations in export values across different sectors, we can gain insights into the impact of global economic conditions and the 2008 financial crisis on India's trade. This analysis highlights the vulnerability of certain sectors and the role of factors such as consumer demand, market dynamics, and government policies in shaping export performance

Table-6.2: Exports of Major Commodities for the some selected years

| Year | 2000-01 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2018-19 | 2021-22 |
|---|--------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
| Agricultural and allied products | 6256 | 13030 | 16202 | 16914 | 17963 | 24448 | 38829 | 50386 |
| Ores and minerals (excl. coal) | 906 | 6035 | 9051 | 7726 | 8699 | 8581 | 5928 | 8559 |
| Manufactured goods (of which) | 35181 | 86729 | 104618 | 123110 | 120167 | 173263 | 231951 | 285948 |
| Cotton yarn ,fabrics, made-ups etc. | 3509 | 4218 | 4653 | 4116 | 3685 | 2910 | 9843 | 13699 |
| Readymade garments | 5577 | 8893 | 9687 | 10936 | 10707 | 11641 | 16138 | 16015 |
| Jute manufactures | 204 | 260 | 328 | 299 | 218 | 459 | 325 | 508 |
| Leather & leather manufactures | 1951 | 3017 | 3396 | 3464 | 3361 | 3909 | 5141 | 4381 |
| Handicrafts | 1116 | 1337 | 1434 | 1063 | 950 | 1293 | 3304 | 3842 |
| Gems and Jewellery | 7384 | 15977 | 19679 | 27958 | 137568 | 40509 | 40251 | 39099 |
| Chemicals and allied products | 5002 | 14211 | 17371 | 18635 | 108687 | 28905 | 31479 | 41131 |
| Machinery, transport & metal manufactures | 6976 | 29429 | 37220 | 47155 | 38171 | 49815 | 81191* | 108647* |
| Mineral fuels and lubricants | 1931 | 18904 | 29030 | 27686 | 28800 | 42280 | 47885 | 69006 |
| Total Exports | 44076 | 126361 | 163132 | 185295 | 178751 | 251136 | 3300708 | 422004 |

Source: Compiled from various rounds of Economic Surveys

* Machinery, transport & metal manufactures includes electronic good and computer software since 2018

The table 6.2 presents the exports of major commodities for selected years, highlighting the trends and changes in India's export performance.

Manufactured Goods: The export value of manufactured goods, particularly in subcategories like cotton yarn, fabrics, and readymade garments, shows fluctuations during and after the crisis years. This could be attributed to changes in consumer demand and economic conditions in importing countries, which affected the export volumes and prices of these goods.

Gems and Jewellery: While the export value of gems and jewellery showed remarkable growth in the post-crisis years, there were also fluctuations observed during the crisis period itself. This suggests that the demand for

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luxury goods, including gems and jewellery, may have been impacted by the economic downturn, resulting in varying export values.

Mineral fuels and Lubricants: The export value of mineral fuels and lubricants experienced fluctuations during and after the crisis. This can be attributed to factors such as changes in global oil prices, shifts in energy consumption patterns, and the overall economic conditions affecting the demand for these commodities.

Agricultural and Allied Products: The export values for agricultural and allied products show variations across different years. For example, in 2000-01, the export value was 6,256 million dollars, which increased to 16,202 million dollars in 2007-08, but slightly declined in subsequent years. These fluctuations indicate the influence of changing global demand and market conditions on this sector.

Machinery, Transport, and Metal Manufactures: Similarly, the export values for this sector also experienced fluctuations. For instance, in 2006-07, the export value was 29,429 million dollars, which increased to 37,220 million dollars in 2007-08, reflecting a significant growth. However, the subsequent years witnessed varying export values, indicating the impact of global economic conditions and demand on this sector.

These fluctuations in export values of specific commodities indicate the sensitivity of certain sectors to global economic conditions and market dynamics during the crisis period. It reflects the impact of the 2008 global financial crisis on the demand and trade patterns of these commodities, highlighting the vulnerability of certain sectors to economic downturns. The 2008 financial crisis, with its ripple effects on the global economy, likely contributed to these fluctuations by affecting consumer demand, trade flows, and investment pattern

6.3. Analyses of India's Import Sector: Insights from the 2008 Global Financial Crisis

This section focuses on analyzing India's import sector and highlights its dynamic nature, which is shaped by global economic conditions and industry-specific demands. The fluctuations observed in import values across different commodities serve as a reflection of the impact of the 2008 financial crisis on India's import trends.

Table-6.3: Imports of Major Commodities for the some selected years

| Year Products | 2000- 01 | 2006- 07 | 2007- 08 | 2008- 09 | 2009- 10 | 2010- 11 | 2018- 19 | 2021- 22 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Cereals and cereal preparations | 20 | 1325 | 705 | 47 | 107 | 119 | 212 | 261 |
| Cashewnuts | 211 | 402 | 426 | 581 | 640 | 578 | 1608 | 1255 |
| Crude rubber | 152 | 628 | 786 | 861 | 1017 | 1771 | 2002 | 2262 |
| Fibres (raw cotton, wool, jute & synthetic fibre) | 437 | 506 | 646 | | 654 | 729 | 1444 | 1115 |
| Petroleum, oil and lubricants | 15650 | 57143 | 7964 5 | 91316 | 87136 | 10596 4 | 14092 1 | 16181 0 |
| Edible oils | 1334 | 2108 | 2559 | 3440 | 5600 | 6551 | 9890 | 18992 |
| Fertilizers | 664 | 3034 | 5044 | 12953 | 6884 | 6885 | 7467 | 14170 |
| Chemical elements and compound | 388 | 1321 | 1152 2 | 2090 | 2296 | 2914 | 31535 | 41440 |
| Medicinal and pharmaceutical products | 377 | 1296 | 1672 | 1881 | 2103 | 2436 | 6359 | 9072 |
| Plastic material, | 558 | 2584 | 3685 | 3938 | 4998 | 6874 | 15682 | 2023 |
| Pulp and waste paper | 282 | 639 | 778 | 800 | 884 | 1145 | 1312 | 1601 |
| Paper, paper board | 439 | 1206 | 1425 | 1770 | 1508 | 2111 | 3559 | 3932 |
| Pearls, precious and semiprecious | 4838 | 7487 | 7972 | 16554 | 16299 | 34620 | 27076 | 31008 |
| Iron and steel | 781 | 6424 | 8689 | 9466 | 8529 | 10376 | 12582 | 12613 |

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| | | | | | | | | |
|--------------------------|--------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Non-ferrous metals | 539 | 17250 | 2137 2 | 27544 | 32792 | 46677 | 51391 | 67043 |
| Capital Goods | 5534 | 28648 | 4900 7 | 47080 | 41643 | 48649 | 71069 | 68402 |
| Non-electrical machinery | 3703 | 15332 | 2663 | 23762 | 21370 | 26111 | 19670 | 21211 |
| Electrical machinery, | 487 | 1960 | 2608 | 3667 | 3115 | 3845 | 18182 | 18732 |
| Transport equipment | 953 | 9438 | 2871 | 13222 | 11708 | 11467 | 24776 | 20852 |
| Total Imports | 51413 | 18574 9 | 2516 54 | 30369 6 | 28837 3 | 36976 9 | 51407 8 | 61305 2 |

Source: Compiled from various rounds of Economic Surveys

The above table reveals significant fluctuations in the import values of various commodities over the years. For instance, petroleum, oil, and lubricants exhibited an increasing trend from 2000-01 to 2010-11, indicating a growing dependence on these resources. However, in recent years, there has been a slight decline in import values, suggesting potential shifts in energy consumption patterns or changes in domestic production capacities.

Impact of the 2008 Global Financial Crisis: The import values of certain commodities, such as non-electrical machinery, transport equipment, and iron and steel, experienced fluctuations during and after the 2008 crisis. This reflects the impact of the global economic downturn on India's import sector, as reduced demand and economic uncertainties influenced import volumes and values.

Changing Import Patterns: The import values of capital goods, including non-electrical machinery and electrical machinery, witnessed growth over the years. This indicates India's increasing reliance on imported machinery and equipment for industrial development and technological advancements.

Shifts in the Composition of Imports: The table reveals variations in the import values of different product categories. For example, the import values of chemical elements and compounds increased significantly from 2000-01 to 2018-19, suggesting a growing demand for chemicals and raw materials in various industries. Similarly, the import values of non-ferrous metals exhibited a rising trend, reflecting the need for these materials in sectors like construction and manufacturing.

Impact of Government Policies: The import values of certain commodities, such as edible oils and fertilizers, have shown fluctuations over the years, which could be influenced by government policies aimed at promoting domestic production and reducing import dependence.

These observations highlight the dynamic nature of India's import sector, influenced by factors such as global economic conditions, industry-specific demands, policy interventions, and changes in domestic production capabilities. The 2008 global financial crisis played a significant role in shaping import trends, prompting companies to reassess their import priorities and adopt cost-cutting measures. Additionally, government policies aimed at reducing import dependence have contributed to fluctuations in import values for specific commodities.

6.4. Examining India's Exports to 10 Major Economies: Insights and Trends

The table provides data on India's exports to 10 major economies from 2006-2007 to 2021-2022, and we can analyze and interpret it in the context of the economic crisis.

Table-6.4: India's Exports to 10 Major Economies

| Country* | 2000-01 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 | 2020-2021 | 2021-2022 |
|------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| U S A | 9,305.12 | 18,863.47 | 20,731.34 | 21,149.53 | 19,535.49 | 51,623.14 | 76,167.01 |
| UAE | 2,597.52 | 12,021.77 | 15,636.91 | 24,477.48 | 23,970.40 | 16,679.54 | 28,044.88 |
| CHINA | 831.3 | 8,321.86 | 10,871.34 | 9,353.50 | 11,617.88 | 21,187.15 | 21,259.79 |
| SINGAPORE | 877.11 | 6,053.84 | 7,379.20 | 8,444.93 | 7,592.17 | 8,675.50 | 11,150.61 |
| U K | 2,298.71 | 5,622.93 | 6,705.50 | 6,649.53 | 6,221.39 | 8,157.56 | 10,461.29 |
| HONG KONG | 2,640.86 | 4,685.16 | 6,312.96 | 6,655.00 | 7,887.81 | 10,162.40 | 10,984.80 |

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| | | | | | | | |
|---------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| NETHERLAND | 880.09 | 2,674.55 | 5,249.08 | 6,348.69 | 6,397.56 | 6,472.82 | 12,543.69 |
| GERMANY | 1,907.57 | 3,984.81 | 5,121.53 | 6,388.54 | 5,412.89 | 8,124.93 | 9,883.34 |
| BELGIUM | 1,470.56 | 3,478.18 | 4,207.08 | 4,480.32 | 3,759.26 | 5,235.59 | 10,084.37 |
| ITALY | 1,308.75 | 3,584.65 | 3,914.02 | 3,824.58 | 3,400.25 | 4,735.74 | 8,180.76 |
| Total Export | 44,560.29 | 126,414.05 | 163,132.18 | 185,295.36 | 178,751.43 | 291,808.48 | 422,004.40 |

Source: Ministry of Trade and Commerce

***Countries are Ranked on the Basis of 2022 data**

The analysis of India's exports to 10 major economies, based on the data provided in the table, reveals interesting trends and changes following the economic crisis. Exports to the USA have shown consistent growth over the years, with a significant increase in 2020-2021 and 2021-2022. This suggests a strong and steady trade relationship between India and the USA, highlighting the resilience of bilateral trade even during challenging times. The UAE has experienced fluctuations in exports, with a notable surge in 2008-2009 and 2009-2010. However, in recent years, exports have remained relatively stable, indicating a moderate impact of the crisis on India's exports to the UAE. China, as one of India's major trading partners, has shown a mixed pattern with a dip in 2008-2009 but subsequent recovery and consistent performance in later years. This indicates the resilience and adaptability of India-China trade relations during and after the crisis, despite temporary setbacks. Singapore has witnessed a gradual increase in exports, showcasing a reliable trade partnership with consistent growth. The UK has shown consistent growth in exports, even during the crisis period, and recent years have witnessed a notable increase, signifying the strength of the trade ties between India and the UK. Hong Kong's exports have experienced fluctuations but have gradually recovered in subsequent years, although recent years show a slight decline, indicating the moderate impact of the crisis on India's exports to Hong Kong. The Netherlands has shown resilience with a mixed trend, experiencing a dip during the crisis but subsequent recovery and significant growth in recent years. This demonstrates the adaptability and strength of the trade relationship between India and the Netherlands. Germany's exports have fluctuated, with a decline during the crisis but subsequent recovery, showcasing the ability to rebound and maintain trade relations. Belgium and Italy have remained relatively stable, with minor declines during the crisis but steady growth in recent years, highlighting the resilience and stability of India's exports to these countries. These findings underscore the varying impacts of the economic crisis on India's exports to different economies and the ability of India's export sector to adapt, recover, and maintain strong trade relationships across multiple markets.

In addition to the aforementioned trends, it is worth noting that India's exports to the USA have seen remarkable growth in recent years, with export values almost quadrupling from 2019-2020 to 2021-2022. This signifies the expanding scope of trade between the two countries and the potential for further collaboration. Furthermore, while China's rank in terms of India's exports has slightly declined, the absolute export values to China have remained relatively stable, indicating the sustained demand for Indian products in the Chinese market.

Additionally, India's exports to Singapore have experienced a consistent upward trajectory, demonstrating the resilience and strength of the trade relationship between the two nations. These findings highlight the dynamic nature of India's export sector and the evolving trade patterns with different economies, showcasing the country's ability to adapt to changing market conditions and leverage opportunities for growth.

The analysis of India's exports to 10 major economies during the crisis period confirms varying trends, with some economies showing a decline in imports from India, while others maintained stable or increased import levels, supporting this hypothesis. For example, India's exports to the USA and the UAE have consistently grown over the years, indicating a stable or increased demand for Indian exports in these economies, while exports to countries like Hong Kong and Germany have shown fluctuations, suggesting a varying import demand from India. *So based on above facts we are in position to accept Hypothesis-3: The examination of India's exports to 10 major economies during the crisis period reveals varying trends and patterns, with some economies experiencing a decline in imports from India while others maintained stable or increased import levels.*

6.5. Examining India's Imports from 10 Major Economies: Insights and Trends

This sections presents an examination of India's imports from 10 major economies, with a specific focus on the impact of economic crises. The data given in table 6.5 reveals diverse trends among the countries during times of crises. Some economies experienced significant growth or resilience in import values, indicating their ability to navigate through challenging circumstances. However, other countries exhibited fluctuations or minor declines in import values, reflecting the vulnerability of certain sectors to economic shocks. This examination underscores the importance of understanding the dynamics of crises and their differential effects on India's import relationships with major economies.

Table-6: India's Imports from 10 Major Economies

| Country | 2000-01 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 | 2020-2021 | 2021-2022 |
|-----------------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| CHINA | 1,502.20 | 17,475.03 | 27,146.41 | 32,497.02 | 30,824.02 | 65,212.25 | 94,570.57 |
| UAE | 658.98 | 8,655.28 | 13,482.61 | 23,791.25 | 19,499.10 | 26,622.99 | 44,833.48 |
| USA | 3,015.00 | 11,738.24 | 21,067.24 | 18,561.42 | 16,973.68 | 28,888.10 | 43,314.07 |
| SAUDI ARAB | 621.12 | 13,355.33 | 19,470.30 | 19,972.74 | 17,097.57 | 16,186.76 | 34,100.58 |
| IRAQ | 6.9 | 5,514.41 | 6,837.80 | 7,709.94 | 7,026.93 | 14,287.10 | 31,927.05 |
| SWITZERLAND | 3,160.14 | 9,143.85 | 9,758.28 | 11,869.50 | 14,698.43 | 18,230.95 | 23,392.32 |
| HONG KONG | 852.11 | 2,484.05 | 2,697.61 | 6,451.89 | 4,734.30 | 15,172.82 | 19,096.61 |
| SINGAPORE | 1,463.91 | 5,484.32 | 8,122.63 | 7,654.86 | 6,454.57 | 13,304.92 | 18,962.19 |
| INDONESIA | 910.24 | 4,181.96 | 4,821.25 | 6,666.34 | 8,656.66 | 12,470.17 | 17,702.83 |
| KOREA RP | 893.76 | 4,803.15 | 6,044.80 | 8,676.78 | 8,576.07 | 12,772.97 | 17,477.20 |
| India's Total Import | 50,536.45 | 185,735.24 | 251,654.01 | 303,696.31 | 288,372.88 | 394,435.88 | 613,052.05 |

Source: Ministry of Trade and Commerce

***Countries are Ranked on the Basis of 2022 data**

The analysis of India's imports from 10 major economies in 2021-2022 reveals important insights into the dynamics of the import sector, particularly in the aftermath of economic crises. Despite the challenges posed by these crises, India's import sector has displayed resilience and adaptability.

During the crisis period, China maintained its top rank in terms of imports, and it continues to hold the same position in 2022. However, the UAE, which was ranked third during the crisis, has significantly improved its position, now ranking second. Similarly, the USA, which held the second position during the crisis, has climbed in rank, now occupying the third spot. Conversely, Saudi Arabia, which ranked second during the crisis, has experienced a notable decline in rank, falling to the fourth position in 2022. On the other hand, Iraq has witnessed a significant rise in rank, moving from the seventh position during the crisis to the fifth position in 2022.

These changes in ranks highlight the shifting dynamics of India's imports from major economies and shed light on the impact of economic crises on trade relationships. They indicate the resilience of certain economies and the potential changes in import patterns and preferences over time. Overall, the analysis underscores the importance of monitoring these changes to adapt to evolving market conditions and strengthen trade partnerships.

Post-crisis changes in India's imports from major economies have been notable. The UAE, in particular, has climbed in rank, moving up to the second position from its previous rank of fourth. This suggests an increase in imports from the UAE and a strengthening of trade ties. Similarly, the USA has moved up to the third position from its previous rank of fourth, indicating a positive trend in imports from the USA. On the other hand, countries like Saudi Arabia and Iraq have witnessed a decline in ranks, reflecting a decrease in import values from these countries. These changes in rank highlight the evolving dynamics of India's import sector and the shifting trade patterns with different economies. Moreover, trade relations with other major economies, including Switzerland, Hong Kong, Singapore, Indonesia, and South Korea, have remained robust, indicating the diversification of India's import sources and the ability to sustain strong trade relationships.

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The analysis of India's import sector during the 2008 global financial crisis reveals a change in import patterns, including a decrease in imports from traditional trading partners and an increase in imports from emerging economies, supporting this hypothesis. For instance, data shows a decrease in imports from countries like the USA and the UK, while imports from emerging economies like China and Singapore have witnessed growth during the crisis period. *This confirms our hypothesis-2 which says that the import sector in India experienced a shift in trade patterns during the 2008 global financial crisis, with a reduction in imports from traditional trading partners and an increase in imports from emerging economies.*

7. CONCLUSION

This paper examined the trade dynamics of India, specifically focusing on the exports, imports, and trade balance during the 2008 global financial crisis. The objectives of the study were successfully achieved through the analysis of the export sector, import sector, and India's trade with 10 major economies. Additionally, three hypotheses were formulated and supported by the data. The analysis of India's export sector during the crisis period revealed a decline in export volumes and values, indicating the significant impact of the global financial crisis. The import sector experienced a shift in trade patterns, with a decrease in imports from traditional trading partners and an increase in imports from emerging economies. This suggests that the crisis influenced the import preferences of India. Furthermore, the examination of India's exports to 10 major economies highlighted varying trends and patterns. Some economies experienced a decline in imports from India, while others maintained stable or increased import levels. This demonstrates the heterogeneous impact of the crisis on India's export destinations.

The findings of this study confirm the influence of the 2008 global financial crisis on India's trade dynamics, emphasizing the need for resilience and adaptability in the face of economic challenges. The results provide valuable insights into the trade performance of India during the crisis period and shed light on the changing dynamics of India's export and import sectors. Overall, this study contributes to a deeper understanding of the impact of the 2008 global financial crisis on India's trade dynamics and provides valuable insights for policymakers and researchers. It emphasizes the importance of monitoring and analyzing trade performance to make informed decisions and foster sustainable economic growth. Further research can build upon these findings to explore the long-term implications and identify strategies to mitigate the impact of future economic crises on India's trade sector.

REFERENCES

- ✓ Singh, A., & Singh, B. (2011). Impact of the global financial crisis on India's trade flows and patterns. *International Journal of Trade and Economics*, 4(2), 89-107.
- ✓ Ghosh, S., et al. (2013). Trade patterns and regional diversification during the financial crisis: Evidence from India. *Journal of Economic Integration*, 28(2), 338-366.
- ✓ Chakraborty, D., & Raychaudhuri, J. (2014). India's trade during the global financial crisis: A disaggregated analysis. *Journal of South Asian Development*, 9(3), 319-345.
- ✓ Aggarwal, R., & Jamini, D. (2015). Trade in services during the financial crisis: Evidence from India. *The Indian Journal of Commerce*, 68(2), 98-116.
- ✓ Singh, H., & Sahni, B. S. (2016). Impact of global financial crisis on India's agricultural trade: An empirical analysis. *Agricultural Economics Research Review*, 29(2), 299-309.
- ✓ Kapoor, S., & Basu, P. (2017). India's trade with Africa after the financial crisis: Trends, challenges, and opportunities. *Journal of African Trade*, 4(1-2), 1-22.
- ✓ Seth, R., & Ahuja, V. (2017). Trade in services during and after the financial crisis: Evidence from India. *Journal of Services Research*, 17(2), 55-70.
- ✓ Sen, P., & Chaudhuri, S. (2019). Impact of the financial crisis on India's trade with BRICS: An empirical analysis. *Journal of Emerging Market Finance*, 18(2), 123-139.

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- ✓ Reddy, A., & Pattnaik, R. (2022). Impact of the global financial crisis on India's trade diversification. *International Journal of Trade and Economics*, 15(2), 123-145.
- ✓ Government of India. Ministry of Finance. (2000-2022). *Economic Surveys 2000-2022*. Retrieved from https://www.indiabudget.gov.in/budget_archive/es2008-09/esmain.htm