

A Comparative Analysis of Public Procurement and Private Sector Trade in the EU, USA, and China

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1. Executive Summary

This report provides a comparative analysis of the estimated values of public procurement, business-to-business (B2B) trade, and business-to-consumer (B2C) trade in the European Union (EU), the United States (USA), and China for the most recent years for which data is available. Public procurement in the EU is estimated at approximately €2.4 trillion per year, roughly 14% of the EU's GDP.¹ The European B2B e-commerce market is valued at around USD 1,672 billion in 2024.⁴ The total B2C e-commerce turnover in the EU reached €887 billion in 2023.⁶ In the USA, public procurement spending is estimated at \$1.8 trillion annually.⁷ The North America B2B e-commerce market reached USD 1,353.8 billion in 2024.⁸ U.S. e-commerce sales amounted to \$1.192 trillion in 2024.⁹ China's public procurement was valued at USD 579 billion in 2020.¹⁰ The China B2B e-commerce market was estimated at USD 1,264.17 billion in 2023.¹¹ China's retail e-commerce sales reached USD 2.8 trillion in 2022.¹² The analysis reveals significant variations in the scale of these economic activities across the three regions, with private sector trade generally exceeding public procurement. However, challenges in data availability, differing definitions, and inconsistencies in reporting standards across regions complicate direct comparisons.

2. Introduction

Both public procurement and private sector trade constitute fundamental pillars of national and global economies, significantly influencing economic growth, job creation, and overall societal well-being. Public procurement, representing the expenditure by governmental bodies on goods, works, and services, accounts for a substantial portion of economic activity worldwide. Estimates suggest that public procurement represents approximately 12% of the Gross Domestic Product (GDP) in Organisation for Economic Co-operation and Development (OECD) countries in 2019 and about 15% of the global GDP in 2021.¹³ Similarly, business-to-business (B2B) and business-to-consumer (B2C) trade, reflecting the exchange of goods and services between businesses and final consumers, respectively, are critical indicators of a market's dynamism and overall economic health. Understanding the relative scale of these economic activities in major global economies such as the European Union, the United States, and China is crucial for policymakers, business strategists, and researchers seeking to navigate the complexities of the international economic landscape.

This report aims to address the user's query by providing a comparative analysis of the total value of public procurement against B2B and B2C trade in the EU, USA, and China, utilizing the most recent available data expressed in USD. The specific objectives of this report are: (1) to ascertain and present the most recent data on the total value of public procurement in USD for the EU, USA, and China; (2) to determine and present the most recent data on the total value of B2B trade in USD for the EU, USA, and China; (3) to identify and present the most recent data on the total value of B2C trade in USD for the EU, USA, and China; (4) to compare the relative sizes of these three economic activities within each region; and (5) to critically analyze the challenges and limitations inherent in obtaining and comparing these data across the three regions due to variations in data availability and definitional discrepancies. This comparative analysis holds significant value for stakeholders seeking to understand the balance between public and private economic activity in these key global players.

3. Public Procurement, B2B, and B2C Trade in the European Union

3.1. Total Value of Public Procurement in the EU (in USD)

The total value of public procurement in the European Union is estimated to be substantial, representing approximately 14% of the EU's GDP, which amounts to over €2.4 trillion per year.¹ This figure underscores the significant role of government spending in the EU economy. The European Commission and various research bodies consistently cite this percentage, indicating its broad acceptance as a reliable estimate.¹ However, the underlying data collection, primarily through the Tenders Electronic Daily (TED) database, faces certain limitations. The European Court of Auditors has pointed out that not all data in TED is accurate, with issues such as abnormal values and inconsistencies in reporting.² Furthermore, a study highlighted missing data in EU procurement records, including contract values and information about awardees, which impedes transparency and comprehensive analysis.¹⁴ The lack of standardized and complete data across EU member states presents a notable challenge in precisely quantifying and comparing public procurement expenditure.¹⁴ Even when data fields are mandated, superficial compliance with "zero" values can occur, undermining the utility of the information.¹⁴ Methodological changes in data collection over time also add complexity to longitudinal comparisons.²

3.2. Total Value of B2B Trade in the EU (in USD)

Estimating the total value of B2B trade in the EU requires careful consideration of the scope. The European B2B e-commerce market is estimated to be significant, reaching USD 1,672 billion in 2024.⁴ This figure represents the gross merchandise value (GMV) or the total sales dollar value of merchandise sold through online B2B platforms. While substantial, this figure likely does not encompass the entirety of B2B trade, which includes offline transactions and the trade of services between businesses. Data from 2023 indicates that EU-US trade in goods and services alone reached €1.6 trillion¹⁷, suggesting that the overall value of B2B trade within the EU and with external partners is considerably larger. The B2B payment market in Europe was valued at USD 378.23 billion in 2022 and was projected to reach USD 435.54 billion in 2023.¹⁸ It is important to note that focusing solely on payment values might lead to double counting, as transactions can involve multiple payments across the supply chain. Therefore, while the e-commerce market value provides a significant indicator of digital B2B activity, a comprehensive valuation of all B2B trade in the EU remains challenging due to the diverse nature of transactions and data collection methods.

3.3. Total Value of B2C Trade in the EU (in USD)

The value of business-to-consumer (B2C) trade in the EU is also substantial, with e-commerce playing a dominant role. Total B2C e-commerce turnover in Europe reached €887 billion in 2023.⁶ Projections for the European B2C e-Commerce market estimated a value of USD 1,135.9 billion in 2023.¹⁹ These figures primarily capture online retail sales and do not fully account for traditional brick-and-mortar retail. However, e-commerce has become an increasingly significant channel for B2C transactions, and these estimates provide a strong indication of the market's size. The harmonization of regulatory

frameworks within the European Union has facilitated cross-border e-commerce, contributing to its growth.²⁰ Data sources for B2C trade often focus on retail sales, with varying degrees of coverage for online and offline transactions, making it essential to consider the scope of the data when making comparisons.

3.4. Comparative Analysis and Challenges in the EU

Comparing public procurement with B2B and B2C trade in the EU reveals that private sector trade, particularly B2B trade, likely surpasses public procurement in overall value. While public procurement accounts for a significant portion of the EU's GDP, the estimated values for B2B and B2C e-commerce alone approach or exceed this figure, and the total value of all B2B and B2C transactions, including offline trade and services, would be considerably larger. However, making precise comparisons is challenging due to the different metrics used (e.g., public procurement as a percentage of GDP vs. e-commerce market value) and the potential for overlaps or exclusions in the data. The lack of standardized definitions for "trade" and the varying scope of data collection across different sectors and member states further complicate direct comparisons. Therefore, while the available data suggests the relative scale of these economic activities in the EU, interpretations should be made with caution, acknowledging the inherent complexities in defining and measuring these broad economic categories.

4. Public Procurement, B2B, and B2C Trade in the United States

4.1. Total Value of Public Procurement in the USA (in USD)

The United States also exhibits a substantial level of government spending through public procurement. Estimates indicate that the USA spends approximately \$1.8 trillion annually on public procurement.⁷ This figure, while significant, suggests a potentially lower proportion of GDP compared to the EU's public procurement spending. Data on US federal spending is often available through official government sources such as the Office of Management and Budget and initiatives like Data.gov, which aim to enhance transparency in government operations.²¹ Public procurement in the US occurs at federal, state, and local levels, and comprehensive data should ideally account for spending across all these levels to provide a complete picture.

4.2. Total Value of B2B Trade in the USA (in USD)

Business-to-business (B2B) trade in the United States represents a significant portion of the economy. The North America B2B e-commerce market is estimated at USD 1,353.8 billion in 2024.⁸ Focusing specifically on the US, the B2B e-commerce market was valued at USD 1,476 billion in 2021, with projections indicating substantial growth in the coming years.²² Furthermore, the US B2B payments transaction market is projected to exceed USD 3.5 trillion by 2033.²³ The considerable difference between the e-commerce market value and the payments transaction value highlights the extensive volume of overall B2B transactions in the US, extending beyond just those conducted through online platforms. Therefore, while e-commerce represents a significant and growing segment of B2B trade, the total value of all inter-firm economic activity in the US is likely much larger.

4.3. Total Value of B2C Trade in the USA (in USD)

Business-to-consumer (B2C) trade in the US is robust, with e-commerce demonstrating strong performance. U.S. e-commerce sales reached \$1.192 trillion in 2024.⁹ The US Census Bureau provides detailed data on e-commerce sales, offering a reliable measure of online retail activity.²⁴ This figure represents a substantial portion of overall B2C trade, although it does not include all traditional brick-and-mortar retail sales. The growth of e-commerce in the US has been significant, more than doubling between 2019 and 2024, indicating a strong shift towards online shopping.⁹ Defining the total value of B2C trade in the US would ideally encompass both online and offline retail sales to provide a comprehensive view of consumer spending.

4.4. Comparative Analysis and Challenges in the USA

In the United States, B2B and B2C trade appear to significantly outweigh public procurement in terms of total value. While public procurement represents a substantial investment, the estimated values for B2B and B2C trade, particularly when considering the broader scope of B2B transactions beyond e-commerce, are considerably larger. The US B2B payments transaction market alone is projected to be nearly double the estimated value of public procurement. Similarly, the combined value of e-commerce and traditional retail sales would likely far exceed government spending. However, as with the EU, direct comparisons are subject to the limitations of different data scopes and definitions. The distinction between e-commerce market value and total B2B transactions, for instance, underscores the need for clarity in defining the scope of "trade." Despite these challenges, the data indicates a strong prevalence of private sector commerce relative to public sector spending in the US economy.

5. Public Procurement, B2B, and B2C Trade in China

5.1. Total Value of Public Procurement in China (in USD)

China's public procurement market has experienced significant growth. In 2020, the value of government procurement in China amounted to 3.7 trillion yuan, equivalent to approximately USD 579 billion.¹⁰ This represents a substantial increase from earlier estimates, such as the \$180 billion estimated in 2011²⁵, highlighting the rapid expansion of the Chinese economy and government spending. However, obtaining comprehensive and consistently updated data on public procurement in China can be challenging due to transparency issues.²⁶ While the Chinese government emphasizes openness in its public procurement regulations²⁷, the actual implementation and availability of detailed data for international comparison can be limited.

5.2. Total Value of B2B Trade in China (in USD)

Business-to-business (B2B) trade in China is characterized by a massive scale, particularly in cross-border transactions. The China B2B e-commerce market was estimated at USD 1,264.17 billion in 2023, with projections for further growth.¹¹ However, the value of RMB cross-border payments in China reached USD 12.53 trillion in 2021³⁰, indicating a significantly larger overall volume of B2B transactions, driven by China's role as a major global manufacturing and trading hub. This vast difference between e-commerce value and total cross-border payments underscores the importance of considering all forms of inter-firm trade when assessing the scale of B2B activity in China.

5.3. Total Value of B2C Trade in China (in USD)

China's business-to-consumer (B2C) e-commerce market is one of the largest globally. Retail e-commerce sales in China reached USD 2.8 trillion in 2022, with projections suggesting continued growth.¹² This enormous volume of online retail reflects China's high internet penetration and a large, digitally savvy consumer base. While these figures primarily represent online sales, they indicate the dominant role of e-commerce in B2C trade in China. The overall value of B2C trade, including any significant offline retail, would likely be even higher.

5.4. Comparative Analysis and Challenges in China

Comparing these figures within China reveals that B2C trade, particularly e-commerce, significantly outweighs public procurement in terms of estimated value. B2B trade, when considering the total value of cross-border payments, also appears to be substantially larger than public procurement. While the 2020 estimate for public procurement in China is considerable at USD 579 billion, the trillions of dollars involved in B2B and B2C trade highlight the dominance of private sector commerce in the Chinese economy. However, it is crucial to acknowledge the challenges in obtaining reliable and directly comparable data for China. Issues related to data transparency and potential differences in reporting standards compared to the EU and the US necessitate caution when interpreting these comparisons. Additionally, the significant role of state-owned enterprises in the Chinese economy might blur the lines between public procurement and B2B trade to some extent, a factor that may not be as prominent in the other two regions.

6. Cross-Regional Comparison and Analysis

The following table summarizes the estimated values of public procurement, B2B trade, and B2C trade for the most recent year available in the EU, USA, and China.

Region	Public Procurement (USD Billion)	B2B Trade (USD Billion)	B2C Trade (USD Billion)	Year
European Union	2,660 (approx.) ¹	1,672 (e-commerce GMV)	1,012 (e-commerce) ²	2024 ¹ /2023 ²
United States	1,800	1,354 (e-commerce) / 3,500+ (payments projected)	1,193 (e-commerce)	2018/2019
China	579	1,264 (e-commerce) / 12,530 (cross-border payments)	2,800 (e-commerce)	2020

1) Converted from €2.4 trillion using an approximate average exchange rate for 2023.
2) Converted from €887 billion using an approximate average exchange rate for 2023.

This comparison reveals several notable trends. China exhibits the largest B2C e-commerce market by a significant margin, and its overall B2B trade volume, as indicated by cross-border payments, is also immense. The EU and the US show comparable levels of public procurement and B2C e-commerce, although the US has a slightly larger estimated value for public procurement. The B2B e-commerce market appears substantial in all three regions.

However, achieving a truly standardized international comparison is fraught with challenges. The definition of "trade" varies, with some data focusing on e-commerce while others attempt to capture all transactions. The scope of "public procurement" can differ, potentially including or excluding sub-national levels and state-owned enterprises. Data collection methodologies and reporting standards are not uniform across regions, and the availability and reliability of data, particularly for China, can be inconsistent. Currency conversion introduces another layer of complexity, with results depending on the exchange rate used.

7. Conclusion

In summary, the analysis indicates that private sector trade, encompassing both B2B and B2C activities, generally surpasses public procurement in terms of total estimated value in the European Union, the United States, and China. China demonstrates a particularly large B2C e-commerce market and a massive volume of B2B cross-border payments, reflecting its global manufacturing and trade dominance. The EU and the US show significant levels of both public procurement and private sector trade, with variations depending on the specific sector and the data sources considered.

The implications of these findings are manifold. The substantial scale of private sector trade underscores the importance of fostering a competitive and open market environment in these regions. The significant value of public procurement highlights the role of government spending as a major economic driver and a tool for policy implementation. The differences in the relative sizes of these sectors across the EU, USA, and China may reflect varying economic structures, policy priorities, and levels of state intervention.

Future research should focus on efforts to harmonize the definitions and reporting standards for public procurement and trade statistics across different countries and international organizations to facilitate more accurate and meaningful comparisons. Improving data transparency and accessibility, particularly for China, is crucial. Developing more robust methodologies for comparing economic data across different regions, taking into account definitional and methodological differences, would also enhance our understanding of the global economic landscape and inform more effective policy decisions. Accurate and comparable data is essential for navigating the complexities of the global economy and for formulating policies that promote sustainable and inclusive economic growth.

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