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Product and Market Decomposition of Vietnam's Creative Goods Export Competitiveness: An RCA-CMS Approach

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ABSTRACT: Creative goods trade has become an important component of international commerce as countries seek to strengthen export value through design, cultural content, craftsmanship, branding, and product differentiation. This study analyses Vietnam's creative goods export competitiveness through product and market decomposition over the period 2010-2023. Using export data from UNCTADstat, the study applies the revealed comparative advantage (RCA) index and constant market share (CMS) decomposition to identify Vietnam's comparative advantages and the sources of export growth. The RCA results show that Vietnam maintained an overall comparative advantage in creative goods exports, but this advantage was concentrated mainly in wickerware, interior products, fashion accessories, yarn, jewellery, and toys. Product-based CMS decomposition indicates that Vietnam's creative goods exports increased by approximately USD 8.21 billion during the study period. Of this increase, the world growth effect accounted for 50.37%, the product composition effect for 15.89%, and the competitiveness effect for 33.74%. Market-based CMS decomposition further shows that competitiveness improvements played a major role in export growth, particularly in the United States, Japan, China, the Republic of Korea, the Netherlands, Canada, and Hong Kong SAR. However, the negative market composition effect suggests that Vietnam's exports were not fully oriented toward the fastest-growing destination markets. The findings imply that Vietnam should strengthen product upgrading, design capabilities, branding, and market diversification to sustain creative goods export competitiveness.

KEYWORDS*:* creative goods, export competitiveness, revealed comparative advantage, constant market share, Vietnam.

1. INTRODUCTION

Creative goods trade has become an important component of international commerce as countries seek to strengthen export value through design, cultural content, craftsmanship, branding, and product differentiation. Creative goods are not limited to cultural artefacts. They also include a wide range of internationally traded products such as interior goods, fashion accessories, toys, wickerware, jewellery, publishing products, visual arts, audiovisual goods, and other design-related manufactures. These products are important for export-oriented economies because they connect production capability with consumer demand, cultural identity, design capacity, and participation in global markets (UNCTAD, 2024).

The growth of creative goods trade reflects broader changes in international consumption and competition. Consumers increasingly demand products with aesthetic, cultural, and functional value, while firms and countries compete not only through production costs but also through originality, design, quality, and responsiveness to market trends. For developing economies, creative goods can support industrial upgrading and higher value creation if domestic producers are able to move beyond basic processing toward design, branding, and market-oriented production.

Vietnam provides a relevant case for studying creative goods export competitiveness. Over the past three decades, the country has become deeply integrated into global trade through export-oriented industrialisation and participation in international production networks. Within this broader transformation, creative goods occupy a distinctive position. Product groups such as interior products, fashion accessories, wickerware, yarn, toys, and jewellery are closely linked to Vietnam's manufacturing base, craft traditions, labour skills, and access to international consumer markets. These features suggest that Vietnam has potential to develop creative goods exports by combining production efficiency with design and market responsiveness.

However, Vietnam's creative goods exports also reveal structural limitations. The country's export strengths appear to be concentrated mainly in tangible, labour-intensive, and design-related goods, while product groups associated with knowledge-intensive, digital, cultural, and media-based creativity remain relatively weak. This raises an important question for Vietnam's export development: whether its creative goods competitiveness reflects sustainable upgrading or remains concentrated in traditional manufacturing and craft-based products.

Export competitiveness is also shaped by destination-market orientation. A country may increase exports because global demand expands, because it specialises in fast-growing product groups, because it targets dynamic destination markets, or because its own competitive

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position improves. In the case of creative goods, destination markets matter because consumer preferences, quality standards, income levels, retail channels, and design trends differ substantially across countries. Market access, distribution channels, delivery reliability, and the ability to meet destination-specific requirements are also relevant for tangible creative goods exported through international trade networks.

Existing research on export competitiveness commonly uses indicators such as revealed comparative advantage, trade specialisation, export similarity, or market share changes to assess a country's position in international markets. These approaches provide useful evidence on whether a country has a favourable export position in a product group. However, studies focusing specifically on Vietnam's creative goods trade remain limited. Much of the existing discussion on Vietnam's export competitiveness concentrates on large manufacturing sectors, agriculture, textiles, footwear, electronics, or furniture, while creative goods are rarely examined as a distinct export category.

This gap is important because aggregate export growth may conceal different sources of competitiveness. Vietnam's creative goods exports may grow because of favourable world demand, because of product specialisation, because of destination-market structure, or because of improved competitiveness. Without product and market decomposition, it is difficult to determine which creative goods groups generate Vietnam's comparative advantage, which groups contribute most to export growth, and which destination markets drive or constrain export performance.

This study addresses that gap by examining Vietnam's creative goods export competitiveness from both product and market perspectives during 2010-2023. The study applies the revealed comparative advantage (RCA) index to identify product groups in which Vietnam has revealed export specialisation. It then uses constant market share (CMS) decomposition to separate export growth into world growth, product composition, market composition, and competitiveness effects. This combined approach allows the analysis to distinguish between established competitive products, emerging product groups, declining specialised products, and destination markets where Vietnam's export growth is associated with stronger competitive performance.

The contribution of the study is threefold. First, it treats creative goods as a distinct empirical trade category rather than as a residual part of merchandise exports or the broader creative economy. Second, it identifies Vietnam's revealed comparative advantage across creative goods product groups. Third, it decomposes export growth by both product groups and destination markets, providing a more detailed basis for assessing whether Vietnam's creative goods export performance reflects external demand, structural orientation, or improvements in competitiveness. The findings provide implications for product upgrading, design capability, branding, market diversification, and export-market access in Vietnam's creative goods sector.

2. BACKGROUND AND LITERATURE REVIEW

2.1. Comparative advantage and export specialisation in creative goods

The theoretical foundation of this study is based on comparative advantage and export specialisation. In international trade theory, countries tend to specialise in products in which they possess relative advantages. These advantages may come from production costs, factor endowments, accumulated capabilities, labour skills, technology, or access to international markets. Because relative productivity and cost advantages are difficult to observe directly across countries and product groups, empirical trade studies often infer comparative advantage from actual export patterns. Balassa (1965) developed the revealed comparative advantage approach on this basis, arguing that a country's export structure can reveal its relative specialisation in international trade.

This perspective is relevant to creative goods because their competitiveness is not determined by production cost alone. Creative goods embody design, cultural content, craftsmanship, symbolic meaning, branding, and intellectual inputs. Their value is created through the combination of physical production and creative differentiation. Therefore, export specialisation in creative goods may indicate whether a country can transform local skills, design capacity, cultural resources, and production capability into internationally tradable products.

UNCTAD classifies creative goods as internationally traded products identified through the Harmonized System, including categories related to art crafts, design, fashion, publishing, visual arts, audiovisual products, and other creative-related manufactures (UNCTAD, 2024). This classification allows creative goods to be examined as a measurable trade category rather than as a broad and abstract concept. Accordingly, this study focuses on creative goods exports, not on the creative economy as a whole.

For Vietnam, this perspective is relevant because creative goods exports are linked to the country's manufacturing base, craft traditions, labour skills, and participation in global value chains. However, comparative advantage may differ substantially across product groups, making it necessary to assess creative goods export competitiveness at both product and market levels.

2.2. Creative goods exports and competitiveness: recent empirical evidence

Recent empirical studies have increasingly treated creative goods and creative exports as a distinct area of international trade analysis. Rather than viewing creative products as a residual part of manufacturing trade, these studies examine how creative exports are shaped by product specialisation, macroeconomic conditions, market openness, institutional factors, and cross-country trade structures.

Şimşek (2025) analysed international trade competitiveness in creative industries across 226 economies using 2023 data and seven trade competitiveness indices. The study shows that competitiveness in creative industries is highly concentrated across countries and product groups. It reports that approximately 78% of the economies examined either have comparative disadvantages or lack international competitiveness in creative industries. It also finds that a small number of creative industry products account for a large share of global creative exports. This finding is relevant to the present study because it suggests that creative goods competitiveness should not be assessed only at the aggregate level. Product-level decomposition is necessary to identify which creative goods actually generate export strength.

Mohamed et al., (2026) examined creative exports in a fragmented global economy by focusing on the role of trade openness, cultural openness, and political openness. The study indicates that creative exports are affected not only by conventional trade conditions but also by broader openness and institutional channels. This perspective is important because creative goods are not purely industrial products. Their international demand can be shaped by cultural exchange, international connectivity, and institutional environments. The study therefore supports the view that creative exports should be analysed as a specific trade category with characteristics that differ from ordinary merchandise exports.

Tran et al., (2025) investigated the impact of macroeconomic factors on creative exports in selected Asian and European countries

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over the period 2010-2022. Using fixed effects and generalized method of moments estimators, the study finds that GDP per capita is a consistent driver of creative exports, while labour skills and trade openness matter more strongly in Europe, and intellectual property protection is significant in Asia. These findings suggest that creative export performance depends on both economic capacity and institutional conditions. For Vietnam, this implies that creative goods export competitiveness should be understood in relation to domestic productive capacity, skills, market openness, and the ability to compete in external markets.

In the Vietnamese context, Dong & Truong (2020) examined the determinants of Vietnam's creative goods exports using a gravity model. Their study finds that Vietnam's creative goods exports are positively affected by the economic scale and market development of Vietnam and partner countries, as well as by the higher education level of partner countries. They also find heterogeneity across creative sectors and sub-sectors of the design industry, and show that Vietnam's creative exports are highly concentrated in developed economies and the design sector. This study provides an important foundation for analyzing Vietnam's creative goods trade. However, its focus is on determinants of bilateral export flows, whereas the present study focuses on decomposing export competitiveness by product groups and destination markets.

These recent and Vietnam-specific studies indicate that creative goods exports are influenced by multiple factors, including product structure, market development, openness, institutional conditions, skills, and partner-country characteristics. However, they do not fully explain how Vietnam's export growth is distributed across creative goods groups and destination markets. This leaves room for an analysis that identifies not only whether Vietnam exports creative goods successfully, but also which products and markets account for its export competitiveness.

2.3. RCA and CMS approaches in export competitiveness studies

The revealed comparative advantage (RCA) index and constant market share (CMS) decomposition are widely used in export competitiveness studies because they capture different but complementary dimensions of trade performance. RCA identifies whether a country is relatively specialised in a product group compared with the world export structure. The index was developed by Balassa (Balassa, 1965) and is based on the idea that actual export patterns can reveal a country's relative comparative advantage. A product group is considered to have revealed comparative advantage when its share in a country's exports is larger than its share in world exports.

RCA is useful because it provides a simple and comparable measure of export specialisation across countries, products, and time. However, RCA alone has important limitations. It shows whether a product group is relatively important in a country's export basket, but it does not explain the source of export growth. A product group may have RCA above 1 but lose market position over time. Conversely, a product group may have RCA below 1 but experience rapid export expansion. Therefore, RCA should be interpreted as a revealed specialisation indicator rather than a complete measure of dynamic export competitiveness.

CMS decomposition addresses this limitation by examining the sources of export growth. The CMS approach originates from early studies of changes in world trade structure and was later formalized as a tool for decomposing export growth (Richardson, 1971; Tyszynski, 1951). In its basic logic, the method compares the actual change in a country's exports with the change that would have occurred if the country had maintained its initial market share. Export growth can then be decomposed into components associated with world demand growth, product or market structure, and changes in the exporter's competitive position. Ahmadi-Esfahani (2006) emphasizes that CMS is useful as a diagnostic decomposition method, but its results should be interpreted carefully because the competitiveness effect is a residual accounting component rather than a directly estimated causal effect.

Recent empirical studies show that CMS remains relevant for export competitiveness analysis. Zdráhal et al., (2023) applied CMS to examine the competitiveness of Czech agrifood exports to the European Union and showed that export performance was shaped by both commodity and territorial specialisation. Cano-Espinosa & Méndez-León (2025) combined RCA and CMS to analyse Mexican fresh grape exports in the United States market, demonstrating that RCA can identify revealed specialisation while CMS explains the sources of changes in export performance. Bulut (2025) used CMS to examine Türkiye's lemon exports during 2015-2024 and showed how decomposition can distinguish between demand-related effects and competitiveness-related effects. In the Vietnamese context, Nguyen & Nguyen (2026) applied CMS to Vietnam's seafood exports to the United States and China, confirming the usefulness of this method for examining export performance across major destination markets.

These studies support the use of a combined RCA-CMS framework in the present research. Creative goods are heterogeneous, and their competitiveness may differ substantially across product groups and destination markets. RCA is useful for identifying which creative goods groups reveal comparative advantage in Vietnam's export structure. CMS is then used to determine whether export growth is associated with world demand, product composition, market composition, or competitiveness effects. Combining the two approaches allows this study to avoid relying on aggregate export growth alone and provides a more detailed assessment of Vietnam's creative goods export competitiveness during 2010-2023.

2.4. Research gap and analytical positioning

The existing literature provides useful evidence on creative exports and export competitiveness, but it leaves an important gap in the case of Vietnam's creative goods. Recent studies have examined creative exports mainly from the perspective of cross-country determinants, macroeconomic conditions, openness, institutional quality, or partner-country characteristics (Mohamed et al., 2026; Tran et al., 2025). These studies help explain why creative exports differ across countries, but they provide limited evidence on the internal structure of export competitiveness within a single exporting economy. In particular, they do not show which creative goods groups generate comparative advantage, which groups drive export growth, and which groups may be losing or gaining competitiveness over time.

Vietnam-specific evidence remains even more limited. Dong & Truong (2020) analyse the determinants of Vietnam's creative goods exports using a gravity model and show that economic scale, market development, partner-country education, and sectoral heterogeneity matter for Vietnam's creative export flows. However, a gravity approach is designed primarily to explain bilateral trade determinants rather than to decompose export competitiveness. As a result, it does not directly answer whether Vietnam's creative goods export growth is driven by global demand expansion, product specialisation, destination-market orientation, or improvements in Vietnam's own competitive position.

This distinction is important because aggregate export growth can be misleading. A country's exports may increase because world demand expands, because it specialises in products with favourable global growth, because it exports to dynamic destination markets, or because

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its own competitiveness improves. Without product and market decomposition, it is difficult to determine whether Vietnam's creative goods export performance reflects sustainable competitive upgrading or merely favourable external conditions. This issue is particularly relevant for creative goods, where product groups differ substantially in design content, production intensity, cultural value, technological requirements, and market demand.

Although recent studies have applied RCA and CMS to several export sectors, including agrifood, seafood, grapes, and lemons (Bulut, 2025; Cano-Espinosa & Méndez-León, 2025; Nguyen & Nguyen, 2026; Zdráhal et al., 2023), this combined approach has rarely been applied to Vietnam's creative goods exports. More importantly, existing evidence does not provide a simultaneous product-market decomposition of Vietnam's creative goods export competitiveness. This creates a specific research gap: the lack of empirical evidence on how Vietnam's creative goods competitiveness is distributed across product groups and destination markets, and on whether export growth reflects comparative advantage, structural effects, market orientation, or competitiveness effects.

This study addresses that gap by analyzing Vietnam's creative goods export competitiveness during 2010-2023 through an RCA-CMS framework. Its contribution is threefold. First, it treats creative goods as a distinct empirical trade category rather than as a residual component of general merchandise exports or the broader creative economy. Second, it identifies Vietnam's revealed comparative advantage across creative goods product groups. Third, it decomposes export growth by both product groups and destination markets, allowing the study to distinguish between world demand, product composition, market composition, and competitiveness effects. This dual decomposition provides a more detailed basis for assessing whether Vietnam's creative goods export growth is associated with genuine competitive improvement, product-level specialisation, or concentration in particular destination markets.

3. METHODOLOGY

3.1. Analytical framework

This study applies a combined revealed comparative advantage (RCA) and constant market share (CMS) framework to examine Vietnam's creative goods export competitiveness. The two methods are used because they capture different dimensions of export performance. RCA identifies whether Vietnam is relatively specialised in a creative goods product group compared with the world export structure. It therefore provides evidence on revealed export specialisation. However, RCA is mainly a descriptive indicator and does not explain the sources of export growth.

CMS decomposition complements RCA by explaining how export growth is generated. It separates export changes into components associated with world demand growth, product or market structure, and competitiveness effects. This distinction is important because an increase in exports does not necessarily imply an improvement in competitiveness. Exports may rise because global demand expands, because the exporter is concentrated in fast-growing products, because it sells to dynamic destination markets, or because the exporter improves its own competitive position.

The combination of RCA and CMS is suitable for this study because Vietnam's creative goods exports need to be examined from both product and market perspectives. RCA is used to identify product groups in which Vietnam has revealed comparative advantage. Product-based CMS is then used to determine whether export growth is driven by world growth, product composition, or competitiveness effects. Market-based CMS is further applied to examine whether Vietnam's export growth is supported by favourable destination-market orientation or by competitiveness improvements in specific markets.

3.2. Data

The study uses annual export data from the UNCTADstat creative goods trade database (UNCTAD, 2026). The dataset provides export values by reporting economy, partner economy, trade flow, creative goods product group, and year. Export values are measured in millions of current US dollars. The empirical analysis focuses on Vietnam's creative goods exports during 2010-2023. The year 2023 is selected as the final year because it is the latest year with sufficient product-level and market-level data coverage at the time of data processing.

The analysis uses three main sets of data. First, Vietnam's exports of creative goods by product group are used to calculate RCA and to conduct product-based CMS decomposition. Second, world exports of creative goods by product group are used as the benchmark for global product growth. Third, Vietnam's creative goods exports by destination market and world exports to the same destination markets are used for market-based CMS decomposition.

For the product-level analysis, the aggregate category "All creative goods" is used only to calculate total export growth and the overall benchmark growth rate. It is not treated as an individual product group in the product decomposition to avoid double counting. Intermediate aggregate categories that overlap with detailed product groups are also excluded where necessary. For the market-level analysis, only country- or economy-level destination markets are retained. Aggregate regions, income groups, and institutional groupings are excluded to avoid repeated counting of the same export flows.

3.3. Variable construction and measurement

The measurement strategy consists of two stages. The first stage calculates Vietnam's revealed comparative advantage in each creative goods product group. The second stage decomposes export growth by product group and destination market using the CMS framework.

The revealed comparative advantage index is calculated following Balassa (Balassa, 1965):

$$RCA_{k,t} = \frac{X_{k,t}^{VN}/X_{t}^{VN}}{X_{k,t}^{W}/X_{t}^{W}} \qquad (1)$$

where $RCA_{k,t}$ denotes Vietnam's revealed comparative advantage in creative goods product group k in year t. $X_{k,t}^{VN}$ is Vietnam's export value of creative goods product group k in year t, while X_{t}^{VN} is Vietnam's total merchandise exports in the same year. $X_{k,t}^{W}$ is world exports of creative goods product group k in year t, and X_{t}^{W} is total world merchandise exports in year t. An RCA value greater than 1 indicates that

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Vietnam has revealed comparative advantage in product group k, whereas a value below 1 indicates the absence of revealed comparative advantage. In this study, RCA is calculated annually for each product group during 2010-2023. The average RCA over the period is used to identify product groups in which Vietnam has persistent export specialisation.

After identifying revealed specialisation, the study applies CMS decomposition to examine the sources of export growth between 2010 and 2023. The CMS framework separates Vietnam's export change into components associated with world growth, structural orientation, and competitiveness. The decomposition is conducted at two levels: product-based CMS and market-based CMS.

For product-based CMS, the overall growth rate of world creative goods exports is calculated as:

$$g^W = \frac{X^W_{2023} - X^W_{2010}}{X^W_{2010}} \quad (2)$$

where X^W_{2010} and X^W_{2023} denote total world exports of all creative goods in 2010 and 2023, respectively. The world growth rate of product group k is calculated as:

$$g^W_k = \frac{X^W_{k,2023} - X^W_{k,2010}}{X^W_{k,2010}} \quad (3)$$

Vietnam's export change in product group k is expressed as:

$$\Delta X^{VN}_k = X^{VN}_{k,2023} - X^{VN}_{k,2010} \quad (4)$$

This change is decomposed into three components:

$$\Delta X^{VN}_k = WG_k + PC_k + CE_k \quad (5)$$

where WG_k is the world growth effect, PC_k is the product composition effect, and CE_k is the competitiveness effect. These components are measured as follows:

$$WG_k = X^{VN}_{k,2010} \times g^W \quad (6)$$

$$PC_k = X^{VN}_{k,2010} \times (g^W_k - g^W) \quad (7)$$

$$CE_k = X^{VN}_{k,2023} - X^{VN}_{k,2010} \times \left(1 + g^W_k\right) \quad (8)$$

The world growth effect measures the export increase that would have occurred if Vietnam's exports of product group k had grown at the same rate as total world creative goods exports. The product composition effect captures whether Vietnam was concentrated in product groups whose world exports grew faster or slower than total world creative goods exports. The competitiveness effect measures whether Vietnam's exports of product group k grew faster or slower than expected after controlling for the global growth of the same product group.

For market-based CMS, the same logic is applied to destination markets. The world growth rate of creative goods exports to destination market m is calculated as:

$$g^W_m = \frac{X^W_{m,2023} - X^W_{m,2010}}{X^W_{m,2010}} \quad (9)$$

where $X^W_{m,2010}$ and $X^W_{m,2023}$ denote world creative goods exports to market m in 2010 and 2023, respectively. Vietnam's export change to market m is calculated as:

$$\Delta X^{VN}_m = X^{VN}_{m,2023} - X^{VN}_{m,2010} \quad (10)$$

This change is decomposed into three components:

$$\Delta X^{VN}_m = WG_m + MC_m + CE_m \quad (11)$$

where WG_m is the world growth effect, MC_m is the market composition effect, and CE_m is the market-level competitiveness effect. These components are measured as follows:

$$WG_m = X^{VN}_{m,2010} \times g^W \quad (12)$$

$$MC_m = X^{VN}_{m,2010} \times (g^W_m - g^W) \quad (13)$$

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$$CE_m = X^{VN}_{m,2023} - X^{VN}_{m,2010} \times (1 + g^W_m) \qquad (14)$$

The market composition effect indicates whether Vietnam's creative goods exports were oriented toward destination markets with faster or slower growth than the global creative goods average. A positive market composition effect suggests favourable market orientation, while a negative value indicates concentration in relatively slower-growing markets. The market-level competitiveness effect shows whether Vietnam improved its export position in a given destination market after accounting for that market's growth.

The interpretation of the CMS results follows a consistent rule. A positive product composition effect indicates that Vietnam was specialised in globally dynamic product groups, while a negative value indicates concentration in slower-growing product groups. A positive market composition effect indicates favourable destination-market orientation, while a negative value suggests an unfavourable market structure. A positive competitiveness effect indicates that Vietnam's exports grew faster than the relevant world product or market benchmark. A negative value indicates weaker relative performance.

3.4. Empirical implementation and consistency checks

The empirical implementation follows a structured procedure to ensure consistency between the RCA calculation and the two CMS decompositions. The original UNCTADstat dataset was first cleaned by retaining only export flows of creative goods for Vietnam and the world during 2010-2023. The product-level dataset was used for the RCA calculation and product-based CMS decomposition, while the market-level dataset was used for the market-based CMS decomposition.

For the product-level analysis, Vietnam's export values and world export values were matched by creative goods product group and year. The aggregate category "All creative goods" was used only to calculate total creative goods export growth and the benchmark world growth rate. It was not treated as an individual product group in the product-based CMS decomposition, since including both the aggregate category and its subcategories would lead to double counting. Overlapping intermediate aggregate product groups were also excluded where necessary so that the decomposition reflected distinct product categories.

For the market-level analysis, Vietnam's creative goods exports to each destination market were matched with world creative goods exports to the same market. To avoid repeated counting of the same export flows, aggregate regions, income groups, and institutional groupings were removed from the market-based decomposition. Only country- or economy-level destination markets were retained in the final calculation. This step is important because the original UNCTADstat data include not only individual economies but also regional and economic group aggregates. Including these aggregates together with individual markets would inflate the total export change and distort the CMS results.

After data cleaning, RCA values were calculated annually for each creative goods product group. Product groups with an average RCA greater than 1 during 2010-2023 were classified as having revealed comparative advantage, while those with an average RCA below 1 were classified as not having revealed comparative advantage. The product-based CMS decomposition was then applied between 2010 and 2023 to identify the contribution of world growth, product composition, and competitiveness effects. The market-based CMS decomposition was applied over the same period to identify the contribution of world growth, market composition, and competitiveness effects across destination markets.

4. RESULTS

4.1. Revealed comparative advantage of Vietnam's creative goods exports

The RCA results provide the first indication of Vietnam's export specialisation in creative goods during 2010-2023. The average RCA for all creative goods was 1.50, suggesting that creative goods occupied a larger share in Vietnam's export structure than in world exports. This result indicates that Vietnam had an overall revealed comparative advantage in creative goods exports over the study period. However, the RCA results also show that this advantage was highly uneven across product groups.

As reported in Table 1, wickerware recorded the highest average RCA, at 8.90. This very high value indicates that wickerware was one of the most strongly specialised creative goods export categories of Vietnam. Interior products ranked second, with an average RCA of 2.75, followed by fashion accessories, with an average RCA of 2.14. These two product groups represent important components of Vietnam's design-related and consumer-goods exports. Their RCA values above 2 suggest that Vietnam's specialisation in these categories was not marginal, but relatively strong compared with the world export structure.

Manufacturing of crafts and design goods also showed a revealed comparative advantage, with an average RCA of 1.91. Yarn, jewellery, and toys had average RCA values above 1, although their levels were lower than wickerware, interior products, and fashion accessories. These findings suggest that Vietnam's creative goods export advantage was concentrated in product groups associated with physical production, craft traditions, applied design, labour skills, and participation in export-oriented manufacturing.

By contrast, several product groups had average RCA values below 1. Carpets recorded an average RCA of 0.64, while software, video games and recorded media recorded 0.36. Architecture, books and publishing, music, performing and visual arts, cultural and natural heritage, and audiovisual, multimedia and photography also remained below the RCA threshold of 1. The lowest RCA values were observed in cultural and natural heritage and audiovisual, multimedia and photography. These results indicate that Vietnam's export specialisation in creative goods remained relatively weak in knowledge-intensive, digital, cultural-content, and media-related product groups.

Table 1. Average RCA of Vietnam's creative goods exports, 2010-2023

Product group	Average RCA	RCA status
Wickerware	8.90	RCA > 1
Interior	2.75	RCA > 1
Fashion accessories	2.14	RCA > 1
Manufacturing of crafts and design goods	1.91	RCA > 1

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All creative goods	1.50	RCA > 1
Yarn	1.49	RCA > 1
Jewellery	1.33	RCA > 1
Toys	1.12	RCA > 1
Carpets	0.64	RCA < 1
Software, video games and recorded media	0.36	RCA < 1
Architecture	0.29	RCA < 1
Books and publishing	0.13	RCA < 1
Music, performing and visual arts	0.09	RCA < 1
Cultural and natural heritage	0.001	RCA < 1
Audiovisual, multimedia and photography	0.0001	RCA < 1
Note: "All creative goods" is reported as an aggregate RCA benchmark and is not treated as an individual product group in the product-based CMS decomposition.		

Source: Author's calculations based on UNCTADstat creative goods export data.

The RCA results indicate that Vietnam's comparative advantage in creative goods was concentrated rather than broad-based. Stronger RCA values were found mainly in tangible, craft-based, design-related, and consumer-oriented products, while knowledge-intensive, digital, cultural-content, and media-related groups remained weak. Because RCA captures revealed specialisation but not changes in export performance, the next section applies product-based CMS decomposition to identify the sources of export growth.

4.2. Sources of export growth by product group

The product-based CMS results show that Vietnam's creative goods exports increased by USD 8,211.40 million between 2010 and 2023. This growth was driven by both external demand and Vietnam-specific performance. The world growth effect accounted for the largest share, indicating that Vietnam benefited substantially from the expansion of global creative goods trade. The positive product composition effect suggests that Vietnam was partly specialised in product groups with favourable global growth. The positive competitiveness effect, at USD 2,770.70 million or 33.74% of total export growth, further indicates that Vietnam's exports grew faster than expected after controlling for world product growth. This effect should be interpreted as an accounting decomposition result, not as a causal estimate.

Table 2. Product-based CMS decomposition of Vietnam's creative goods exports, 2010-2023

Component	Value, million USD	Contribution, %
Total export change	8,211.40	100.00
World growth effect	4,136.08	50.37
Product composition effect	1,304.62	15.89
Competitiveness effect	2,770.70	33.74

Source: Author's calculations based on UNCTADstat creative goods export data.

The product-level results reveal substantial differences across creative goods groups. Interior products recorded the largest positive competitiveness effect, at USD 2,446.45 million. Vietnam's exports of interior products increased from USD 1,957.47 million in 2010 to USD 5,482.70 million in 2023. This product group therefore combined a high RCA value with a large positive competitiveness effect. It can be considered one of the strongest pillars of Vietnam's creative goods export competitiveness.

Fashion accessories also made a large contribution to export growth. Exports increased from USD 741.54 million in 2010 to USD 3,336.46 million in 2023, while the competitiveness effect reached USD 1,935.98 million. This result is consistent with the RCA finding, since fashion accessories had an average RCA of 2.14. The combination of revealed comparative advantage and positive competitiveness effect indicates that this product group was both specialised and dynamically competitive during the study period.

Toys also showed strong export performance. Its competitiveness effect was USD 1,350.33 million, while its average RCA was slightly above 1. This suggests that toys were not among the strongest RCA categories, but they contributed significantly to export growth. Yarn and wickerware also recorded positive competitiveness effects, although their export growth contributions were smaller than those of interior products, fashion accessories, and toys. Wickerware is especially notable because it had the highest average RCA but a smaller absolute competitiveness effect. This means that a high RCA value does not necessarily imply a large contribution to total export growth, especially when the product group has a smaller export scale.

Software, video games and recorded media presents an important contrast. This group had an average RCA below 1, at 0.36, which means that Vietnam did not have revealed comparative advantage in this product group over the whole period. However, its competitiveness effect was strongly positive, at USD 1,741.55 million. Exports increased from USD 36.62 million in 2010 to USD 1,802.02 million in 2023. This result suggests that although the group was not yet a strong area of revealed specialisation, it experienced rapid export expansion and may represent an emerging creative goods segment.

Jewellery shows the opposite pattern. Its average RCA was above 1, at 1.33, but its competitiveness effect was strongly negative, at USD -5,524.63 million. Vietnam's jewellery exports declined from USD 2,738.26 million in 2010 to USD 643.64 million in 2023. This result is particularly important because it shows the limitation of relying on RCA alone. RCA indicates revealed specialisation based on export shares, but it does not show whether a product group is gaining or losing competitiveness over time. In the case of jewellery, Vietnam had revealed comparative advantage on average over the period, but the product-based CMS result shows a substantial deterioration in export performance between 2010

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and 2023.

Table 3. Selected product-level CMS results, 2010-2023

Product group	Exports 2010 (million USD)	Exports 2023 (million USD)	Export change (million USD)	Competitiveness effect (million USD)
Interior	1,957.47	5,482.70	3,525.24	2,446.45
Fashion accessories	741.54	3,336.46	2,594.92	1,935.98
Software, video games and recorded media	36.62	1,802.02	1,765.41	1,741.55
Toys	156.99	1,637.39	1,480.40	1,350.33
Carpets	21.40	377.11	355.71	349.86
Yarn	172.14	461.99	289.86	241.43
Wickerware	148.12	323.01	174.88	117.55
Books and publishing	5.47	111.56	106.10	107.32
Jewellery	2,738.26	643.64	-2,094.63	-5,524.63

Source: Author's calculations based on UNCTADstat creative goods export data.

Overall, the product-based CMS results show that Vietnam's creative goods export growth was not generated by a single factor. It was supported by global demand expansion, favourable product composition, and product-level competitiveness gains. However, the contribution of each product group differed sharply. Interior products and fashion accessories were the strongest established competitive groups, toys showed important growth, software, video games and recorded media appeared as an emerging category, and jewellery experienced a major decline in competitiveness.

4.3. Sources of export growth by destination market

The market-based CMS decomposition examines whether Vietnam's creative goods export growth was supported by favourable destination-market orientation or by competitiveness gains within destination markets. This distinction is important because a country may increase exports either by selling more to fast-growing markets or by improving its relative export position within the markets it already serves.

After excluding regional aggregates, income groups, and institutional groupings, the market-based decomposition retained only country- or economy-level destination markets. This cleaning step was necessary to avoid double counting because the original trade dataset includes both individual economies and aggregate market groupings. After this correction, Vietnam's creative goods exports increased by USD 8,214.04 million between 2010 and 2023. The small difference between this value and the product-based total export change is due to rounding and differences in the cleaned decomposition datasets.

As shown in Table 4, the world growth effect was USD 4,134.26 million, equivalent to 50.33% of total export growth. This confirms that the expansion of global demand was also important from the market perspective. The competitiveness effect was USD 5,019.86 million, equivalent to 61.11%. This value is larger than the total export increase because the market composition effect was negative. The market composition effect was USD -940.08 million, equivalent to -11.44%.

Table 4. Market-based CMS decomposition of Vietnam's creative goods exports, 2010-2023

Component	Value, million USD	Contribution, %
Total export change	8,214.04	100.00
World growth effect	4,134.26	50.33
Market composition effect	-940.08	-11.44
Competitiveness effect	5,019.86	61.11

Source: Author's calculations based on UNCTADstat creative goods export data

The negative market composition effect is a central result. It suggests that Vietnam's creative goods exports were not fully concentrated in the fastest-growing destination markets. In other words, Vietnam achieved strong export growth despite an unfavourable market composition effect. This means that market-level competitiveness gains were strong enough to offset the negative contribution of destination-market structure. The result also implies that Vietnam's export growth should not be interpreted simply as the outcome of being present in dynamic markets. Rather, it was associated with improved relative performance in specific destination markets.

The United States was by far the most important destination market. Vietnam's creative goods exports to the United States increased from USD 1,293.96 million in 2010 to USD 7,142.62 million in 2023, an increase of USD 5,848.66 million. The competitiveness effect in the United States market reached USD 4,649.98 million, the largest among all destination markets. This result indicates that the United States was the main driver of Vietnam's market-level competitiveness gains.

Japan was the second major destination market, with exports increasing from USD 432.21 million to USD 1,324.62 million. The competitiveness effect in Japan reached USD 705.86 million. China also recorded a strong increase, from USD 54.13 million to USD 615.76 million, with a competitiveness effect of USD 483.85 million. The Republic of Korea, the Netherlands, Canada, Hong Kong SAR, Germany, the United Kingdom, and Spain also recorded positive export changes and positive competitiveness effects. These results suggest that Vietnam's creative goods export growth was supported by competitiveness gains in both developed markets and major Asian markets.

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Table 5. Main destination markets for Vietnam's creative goods exports, 2010-2023

Market	Exports 2010 (million USD)	Exports 2023 (million USD)	Export change (million USD)	Competitiveness effect (million USD)
United States	1,293.96	7,142.62	5,848.66	4,649.98
Japan	432.21	1,324.62	892.41	705.86
China	54.13	615.76	561.63	483.85
Republic of Korea	82.70	437.15	354.45	241.95
Netherlands	90.84	424.07	333.23	256.63
Canada	83.36	355.61	272.25	257.26
China, Hong Kong SAR	23.49	309.69	286.20	270.36
Germany	222.82	502.90	280.08	210.51
United Kingdom	185.65	426.92	241.27	169.73
Spain	50.67	254.92	204.25	183.27

Source: Author's calculations based on UNCTADstat creative goods export data.

The United States accounted for the largest export increase and the largest market-level competitiveness effect, indicating its central role in Vietnam's creative goods export expansion.

4.4. Integrated RCA-CMS interpretation

The integrated RCA–CMS classification combines revealed specialisation with dynamic export performance. It distinguishes product groups with established competitiveness, declining specialisation, emerging potential, and weak export positions.

Table 6. Integrated RCA-CMS classification of Vietnam's creative goods exports

Classification	Criteria	Product groups
Strong competitive products	Average RCA > 1 and competitiveness effect > 0	Wickerware; Interior; Fashion accessories; Yarn; Toys
Declining specialised product	Average RCA > 1 and competitiveness effect < 0	Jewellery
Emerging products	Average RCA < 1 and competitiveness effect > 0	Software, video games and recorded media; Carpets; Books and publishing
Weak products	Average RCA < 1 and limited export scale	Architecture; Music, performing and visual arts; Cultural and natural heritage; Audiovisual, multimedia and photography

Source: Author's classification based on RCA and CMS results.

The integrated classification shows four distinct patterns of competitiveness. Wickerware, interior products, fashion accessories, yarn, and toys combine RCA values above 1 with positive competitiveness effects, indicating established competitive products. Jewellery represents a declining specialised product because it had RCA above 1 but a negative competitiveness effect. Software, video games and recorded media, carpets, and books and publishing had RCA below 1 but positive competitiveness effects, suggesting emerging export potential. The remaining cultural-content, media-related, and knowledge-intensive groups remained weak in both revealed specialisation and export scale.

Overall, the integrated RCA–CMS results show that Vietnam's creative goods competitiveness improved during 2010–2023, but remained concentrated by product group and destination market. Product-level strengths were strongest in tangible, craft-based, and design-related goods, while market-level growth depended heavily on competitiveness gains in major destination markets.

5. DISCUSSION

Vietnam's creative goods export competitiveness improved during 2010–2023, but remained structurally concentrated. The RCA–CMS results indicate that Vietnam's strengths lie mainly in tangible, craft-based, and design-related goods rather than in the full creative economy. This pattern reflects the country's manufacturing base, craft traditions, labour skills, and access to international consumer markets.

The product-level findings also show why RCA and CMS need to be used together. RCA identifies revealed specialisation, but it does not show whether that specialisation is strengthening or weakening over time. Interior products and fashion accessories represent the strongest cases because they combine revealed comparative advantage with positive competitiveness effects and large export scale. These groups appear to be the core pillars of Vietnam's creative goods exports. By contrast, wickerware has the highest RCA but a smaller absolute contribution to export growth, showing that strong specialisation does not necessarily mean large growth contribution.

Two contrasting cases are especially important. Software, video games and recorded media had RCA below 1 but a positive competitiveness effect, suggesting possible emerging potential within goods-based creative exports. However, this result should be interpreted cautiously because the dataset covers creative goods, not creative services or platform-based digital activities. Jewellery shows the opposite pattern. It had RCA above 1 but a strongly negative competitiveness effect, indicating that revealed comparative advantage can persist in average terms even when a product group is losing export performance. This confirms that RCA alone is insufficient for assessing dynamic competitiveness.

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The market-level results add another important issue. Vietnam achieved positive competitiveness effects in several major destination markets, but the market composition effect was negative. This suggests that export growth was driven more by improved relative performance in key markets than by favourable destination-market orientation. The strong role of the United States and other major markets indicates that Vietnam has developed export capacity in important consumer destinations. However, concentration in a limited number of markets also creates vulnerability to changes in demand, trade policy, retail cycles, logistics costs, quality standards, and consumer preferences.

Although this study does not directly estimate logistics variables, the market-based CMS results are relevant to broader discussions on trade connectivity and export-market access. Tangible creative goods such as interior products, fashion accessories, wickerware, carpets, and toys depend not only on production and design capability but also on delivery reliability, distribution channels, compliance with destination-market requirements, and the ability to serve distant consumer markets efficiently. Weaknesses in market access or distribution networks may limit the ability of exporters to enter faster-growing markets, even when product-level competitiveness improves.

The findings imply that Vietnam needs differentiated strategies for different creative goods groups. Established competitive products such as interior products, fashion accessories, wickerware, yarn, and toys should move beyond volume expansion toward higher value-added positioning. This requires stronger design capability, branding, packaging, product standards, material innovation, intellectual property protection, and compliance with buyer requirements. Emerging groups such as software, video games and recorded media, carpets, and books and publishing require capability-building support, creative skills, digital distribution, copyright protection, and stronger links between producers and export channels. Weak cultural-content and media-based groups require broader creative ecosystem development rather than export promotion alone.

The findings should be interpreted within the limits of RCA and CMS. RCA is a revealed specialisation index, while CMS is an accounting decomposition method. The competitiveness effect does not identify causal mechanisms. It may reflect price competitiveness, product quality, design capability, production capacity, buyer relationships, exchange-rate movements, trade agreements, logistics performance, or changes in global sourcing patterns. Future research could extend this study by using sub-period CMS decomposition, firm-level data, or econometric models to identify the determinants of Vietnam's creative goods export competitiveness more directly.

Overall, Vietnam's creative goods exports have become more competitive, but the structure of competitiveness remains narrow. The next stage of development requires product upgrading, stronger creative content, market diversification, and improved capacity to serve demanding destination markets. Without these changes, export growth may continue, but Vietnam's creative goods competitiveness will remain concentrated and vulnerable to product- and market-specific shocks.

6. CONCLUSIONS

This study examined Vietnam's creative goods export competitiveness during 2010-2023 using a combined RCA-CMS approach. By decomposing export performance by product group and destination market, the study provides evidence on both revealed comparative advantage and the sources of export growth.

The results show that Vietnam maintained an overall revealed comparative advantage in creative goods, but this advantage was concentrated in tangible, craft-based, and design-related products. CMS decomposition further shows that export growth was supported by world demand expansion, favourable product composition, and competitiveness gains. Interior products and fashion accessories were the strongest established competitive groups, while software, video games and recorded media showed emerging potential. Jewellery showed the opposite pattern, with RCA above 1 but a negative competitiveness effect.

From the market perspective, Vietnam improved its relative export position in several major destination markets, especially the United States, Japan, China, the Republic of Korea, the Netherlands, Canada, and Hong Kong SAR. However, the negative market composition effect suggests that Vietnam's creative goods exports were not fully oriented toward the fastest-growing destination markets.

The findings imply that Vietnam should strengthen product upgrading, design capability, branding, intellectual property protection, and market diversification. Established competitive products need to move toward higher value-added positioning, while emerging and weaker creative goods segments require broader capability development and better access to international markets.

This study is limited by the descriptive nature of RCA and CMS, which do not identify causal mechanisms. It also focuses only on creative goods recorded in merchandise trade data and does not cover creative services or digital platform activities. Future research could extend the analysis through sub-period decomposition, firm-level data, or econometric models to examine the drivers of Vietnam's creative goods export competitiveness more directly.

REFERENCES

1) Ahmadi-Esfahani, F. Z. (2006). Constant Market Shares Analysis: Uses, Limitations and Prospects. *Australian Journal of Agricultural and Resource Economics*, *50*(4), 510–526. https://doi.org/10.1111/j.1467-8489.2006.00364.x
2) Balassa, B. (1965). Trade Liberalisation and "Revealed" Comparative Advantage. *The Manchester School*, *33*(2), 99–123. https://doi.org/10.1111/j.1467-9957.1965.tb00050.x
3) Bulut, O. D. (2025). COVID-19's Impact on Türkiye's Lemon Exports: Constant Market Share Decomposition (2015–2024). *Sustainability*, *17*(19), 8700. https://doi.org/10.3390/su17198700
4) Cano-Espinosa, D., & Méndez-León, J. R. (2025). The Competitive Dynamics of Mexican Fresh Grapes in the U.S. Market. *World*, *6*(1), 31. https://doi.org/10.3390/world6010031
5) Dong, C. Van, & Truong, H. Q. (2020). The Determinants of Creative Goods Exports: Evidence from Vietnam. *Journal of Cultural Economics*, *44*(2), 281–308. https://doi.org/10.1007/s10824-019-09359-y
6) Mohamed, N. M. A., Kamal, K. M. M., Abdelkhalek, R. H. M., Binsuwadan, J., & Frega, K. A.-E. A. (2026). Creative Exports in a Fragmented Global Economy: The Role of Trade, Cultural, and Political Openness. *Sustainability*, *18*(10), 4644. https://doi.org/10.3390/su18104644

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7) Nguyen, N. M., & Nguyen, T. H. (2026). Constant Market Share Analysis of Vietnam's Seafood Exports to the United States and China. *Hue University Journal of Science: Economics and Development*, *135*(5S-1), 163–179. https://doi.org/10.26459/hueunijed.v135i5S-1.8321
8) Richardson, J. D. (1971). Constant-market-shares analysis of export growth. *Journal of International Economics*, *1*(2), 227–239. https://doi.org/10.1016/0022-1996(71)90058-4
9) Şimşek, M. C. (2025). Creative Industries in Global Trade: An International Competitiveness Analysis. *Journal of Life Economics*, *12*(1), e2691. https://doi.org/10.15637/jlecon.2691
10) Tran, Q. T. N., Nguyen, T. N. M., Le, L. K., Nguyen, G. H. T., Dinh, K. B., Le, T. M., & Trinh, T. M. (2025). The Impact of Macroeconomic Factors on the Creative Economy: A Comparative Analysis of European Countries and Asian Countries. *Journal of International Economics and Management*, *25*(3), 202–215. https://doi.org/10.1108/JIEM-05-2025-0037
11) Tyszynski, H. (1951). World Trade in Manufactured Commodities, 1899–1950. *The Manchester School*, *19*(3), 272–304. https://doi.org/10.1111/j.1467-9957.1951.tb00012.x
12) UNCTAD. (2024). *Creative Economy Outlook 2024*. United Nations Conference on Trade and Development.
13) UNCTAD. (2026, June 11). *UNCTADstat Creative Economy Statistics Database*. United Nations Conference on Trade and Development. https://unctadstat.unctad.org/
14) Zdráhal, I., Lategan, F. S., & van der Merwe, M. (2023). A Constant Market Share Analysis of the Competitiveness of the Czech Republic's Agrifood Exports (2002–2020) to the European Union. *Agricultural Economics*, *69*(12), 498–509. https://doi.org/10.17221/248/2023-AGRICECON

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