

Integrating fiscal issues in global distribution network design

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Abstract: Global distribution network design (GDND) is currently facing a phase of substantial changes, since logistics decisions need to consider also fiscal and legal aspects. Although the adoption of an integrated approach may create new opportunities for GDND, logistics and fiscal domains are based on different principles. Also, the potential trade-off between logistics and fiscal issues is still under-investigated in the academic literature. The purpose of this paper is to fill this gap by considering the location problem for a single distribution layer. In particular, the addressed problem refers to a multinational corporation (MNC) that considers shifting the optimal logistics location of a central warehouse (CW) in a close low-tax jurisdiction, although additional cross-border transports may occur. A three-phase methodology was adopted. First, two available cross-country logistics configurations were formalised and modelled by means of interviews with MNCs, as well as through literature review. The identified configurations imply a traditional or a bonded CW in a close low-tax jurisdiction. Then, a cost-based model was developed, combining logistics and fiscal cost functions, with the aim of maximising after-taxes bottom-line results. Finally, the model was applied to a MNC willing to distribute in the European market from a Swiss warehouse. A sensitivity analysis was performed, varying annual demand, product value, operating expenses, exchange rate and Swiss corporate tax rate. Results confirmed the impact of taxation on GDND, and highlighted the importance of including fiscal issues when designing global distribution networks. A cross-country logistics configuration may turn out as the most suitable, if the reduction in corporate income taxes overcomes the increase in logistics cost, and corporate tax rate emerges as the main element driving network design.

Keywords: Global distribution network design, fiscal issues, cross-country flows, after-tax profit maximisation, analytical model

1. Introduction

In the last decades, supply chain environments have changed at an accelerating pace throughout the globe, given the opportunities of growth and profitability created by globalisation for new sources of supply and production, new partners to innovate and develop new products, and new markets (Taylor, 1997; Kind et al., 2004). When addressing downstream supply chains, from factories to final markets, the problem is termed as global distribution network design (GDND) (Olhager et al., 2015).

GDND is experiencing a phase of substantial changes, since multinational corporations (MNCs) are progressively adopting an integrated approach where not only logistics elements are taken into account (e.g. path minimisation, risk pooling, modularisation, postponement), but also legal and fiscal aspects (e.g. fiscal principles, customs rules, after-tax profit maximisation, local content requirements), as attested by Norrman and Henkow (2014). Although these elements have always impacted on supply chain performance, only in recent years they have started to be considered when designing a global distribution network. Indeed, they can affect the decisions to be taken (e.g. facility location, postponement strategy, international flows management), and the evaluation metrics (e.g. total transport costs, total customs duties, delivery lead time, total tax liabilities) (Cho and Kang, 2001; MacCarthy and Atthirawong, 2003; Song and Sun, 2016).

This integrated approach introduces new challenges for MNCs, since logistics and fiscal domains are usually driven

by different principles and frictions may arise. Distortions in the optimal logistics configuration may emerge, eventually involving cross-country flows. Although these flows seem unnecessary from a logistics and environmental viewpoint, they may result efficient from a total business perspective (i.e. focusing on after-tax profit maximisation), as per Norrman and Henkow (2011).

Integrating fiscal issues in GDND promises to be a stimulating research stream for the years to come (Fernandes et al., 2015). Despite the rising debate in the practitioners' community (Van Hoek et al., 2008; Henkow and Norrman, 2011; Webber, 2011; Häntsch and Huchzermeier, 2016), the understanding of potential alignment problems between logistics and legal issues is still under-represented in the academic literature. In addition, neither the convenience of the different configurations nor the context in which each configuration performs better are clear (Norrman and Henkow, 2014). The purpose of this paper is to fill this gap by offering a first investigation of the available configurations in GDND for MNCs when integrating logistics and fiscal issues. The focus is on a location problem for a single distribution layer. MNCs may consider shifting the optimal logistics location of a central warehouse (CW) to a close low-tax jurisdiction, when adding fiscal issues to pure logistics ones. Since this solution may drive additional cross-border transport, the current CW and the low-tax jurisdiction should be close one another. A three-phase methodology was adopted. First, available cross-country logistics configurations were formalised and modelled by means of both a literature

review and semi-structured interviews with MNCs. Then, a cost-based model was developed, combining logistics and fiscal cost functions, with the aim of maximising after-taxes bottom-line results. The model was then applied to a MNC distributing in the European market from a Swiss warehouse. A sensitivity analysis was performed, varying annual demand, product value, operating expenses, exchange rate and Swiss corporate tax rate.

The remainder of this paper is organised as follows. Next section reports the results of literature review. Section 3 describes the methodology adopted. In Section 4 the identified network configurations are illustrated, whereas in Section 5 the model formulation is presented. The main results are discussed in Section 6. Directions for further research are shown in Section 7.

2. Literature review

In line with the aim of this research, this section summarises the contributions related to the introduction of fiscal elements in GDND. The last decades of the twentieth century have witnessed a considerable expansion of supply chains into international locations. Indeed, as trade barriers fall and communications technologies improve, it has become easier and more cost-effective to manage business operations across international borders (Dornier et al., 1998; Webber, 2011). The globalisation of supply chains has led to an explosion of world trade, since raw materials, components, semi-finished products, and finished products flowing through the global supply chain cross national borders many times (Lee, 2010). Due to international operations and the related cross-country flows, a supply chain that transcends national boundaries leads to challenges in both design and execution phases (Harrison, 2001). GDND include additional issues with respect to pure logistics ones, such as trade barriers to international trade, tariffs, labour cost, labour productivity, government policies, economic and political stability, and environmental concerns (MacCarthy and Atthirawong, 2003). All these elements tend to change rapidly in an international context, and such changes affect competitive advantages provided by specific locations (Dornier et al., 1998).

To optimise the overall performance of the supply chain, MNCs are increasingly considering fiscal issues when designing global distribution networks, since they complement traditional cost factors such as handling, picking, transport and warehousing used in network design decisions (Fernandes et al., 2015). However, logistics and fiscal domains are based on different principles. The logistics principles address not only the logistics structure (e.g. structures simplification and compression, modularisation), but also value-added processes (postponement) and inter-organisational integration (e.g. process integration, supply chain collaboration, outsourcing). Vice versa, fiscal action-oriented principles are related to domicile, source, territoriality, type of goods, rule of origin, destination and arm's-length, and the interaction between these principles in common decisions could create frictions in the action-oriented system

(Norrman and Henkow, 2014). Moreover, considerations about duties and duty drawback, local content requirements and taxes are needed (Lee, 2010), since the existence of different tax systems makes one country more attractive in terms of taxation than others (Fernandes et al., 2015). Customs duties are costs assessed for the importation of goods. They usually depend on goods value, goods typology, and country of origin (Häntschi and Huchzermeier, 2016). In order to provide support to domestic manufacturing activities, some countries require a minimum local content to allow firms for selling a specific kind of product (Mariel and Minner, 2015). This restriction is often calculated as a ratio of the value added to the product which must occur within the country where the product is sold (Mariel and Minner, 2015; Häntschi and Huchzermeier, 2016). Finally, corporate income tax rate may greatly affect location choice for key operations, although tax regulations are very complex and specific for each country (Fernandes et al., 2012; Seppala et al., 2014).

When designing global distribution networks, understanding and effectively managing tax liabilities can result in important savings for MNCs (Webber, 2011). On one side stand-alone supply chain activities, such as network optimisation, strategic sourcing and lean manufacturing, reduce operating expenses and working capital requirements, as well as they improve cash flow and asset utilisation. However, these initiatives focus only on pre-tax cost reduction, and each dollar of operating savings may not necessarily transform into an actual reduction in cost after taxes (Fernandes et al., 2015). Changes in global distribution network directly impact on how and where value added activities are carried out, influencing direct and indirect taxes (Norrman and Henkow, 2014). On the other side, when tax planning is performed independently from network design, it may lead to suboptimal strategies with respect to operating cost and profit (Balaji and Viswanadham, 2008). If a MNC decides to design its distribution network according only to tax purposes, it may underestimate the overall supply chain costs.

Since the overall system consists of four subsystems (logistics system and three separated systems for direct taxes, indirect taxes and customs) (Henkow and Norrman, 2011), the adoption of a balance approach that includes both logistics and fiscal issues may result in noticeable savings for MNCs (Fernandes et al., 2015). MNC should link income taxes and supply chain considerations related to GDND, when aiming at maximising after-tax profit through determining where to locate business operations (Webber, 2011).

To conclude, the literature reveals that integrating fiscal issues in GDND is a promising research stream. MNCs willing to adopt this perspective need to re-design their distribution network, deciding where to locate their distribution centres taking into account tax liabilities. While some studies concentrate on the identification of the main principles underlying this kind of decisions, still little research has been performed so far on the identification of

the available network configurations and their quantitative evaluation.

3. Methodology

The research was structured into three main phases. First, a thorough literature review was conducted to understand both logistics and fiscal approaches, and the possible drivers behind company choices. Semi-structured interviews were conducted with MNCs in order to ground the research gap into business and to generate knowledge spill-overs from a business environment to an academic one and vice versa. The interviews highlighted that, when integrating fiscal issues into the decision process, a MNC may consider shifting the optimal logistics location of a central warehouse (CW) in a close low-tax jurisdiction, although additional cross-border transports may occur. They also revealed that the second layer distribution choices are more driven by marketing issues (e.g. customer needs and service level maximisation) rather than by logistics costs. Therefore, we focused only on the first distribution network layer and, in particular, we addressed the location problem for a CW. Two network configurations were formalised and modelled: although both configurations involved cross-country flows, they diverged according to the facility type (i.e. traditional warehouse versus bonded warehouse).

Second, a cost-based model was developed with the aim of enabling a quantitative evaluation of the identified distribution configurations. The model offers an integrated approach between logistics and fiscal issues, since it combines logistics and fiscal cost functions, with the aim of maximising after-taxes bottom-line results.

Third, since global location decisions are strictly depending on industry and country (MacCarthy and Atthirawong, 2003), we tested the application of the model in a real case. The case was characterised by a MNC operating in the fashion industry and distributing in the European market from a CW located in Northern Italy. We considered shifting CW location to Switzerland (i.e. a close low-tax jurisdiction) and compared after-tax profit for the two above-identified configurations with the current scenario. Then, a sensitivity analysis was performed, varying those parameters that literature highlights as the most relevant (i.e. annual demand, product value, operating expenses, exchange rate and corporate tax rate), in order to assess which drivers are mostly affecting company choices.

4. Cross-country logistics configurations

A number of assumptions have been considered to define the examined cross-country logistics configurations. For instance, they include:

I. As a base case (BC), MNC’s distribution network groups customers by homogeneous areas, where regional barriers to trade are reduced or even eliminated among the participating States. It is assumed that a Central Warehouse (CW) is devoted to each homogeneous area.

II. Starting from BC, it is assumed that the MNC is willing to move the CW from the current location in a certain homogeneous area to a close low tax-jurisdiction. Closeness is considered to limit logistics distortions.

III. Since the considered low-tax jurisdiction does not belong to the homogeneous area, trade barriers, customs duties, customs clearance operations, etc. were all included. All these costs depend on the product origin.

IV. Since network re-design only involve the single node (i.e. CW) and its inbound and outbound flow, it is assumed that global network, both up-stream (plants, subsidiaries, suppliers, consolidation hubs, etc.) and down-stream (other CWs, local warehouses, transit points, customers, etc.), is not affected by such decision.

V. The proposed configurations compared the advantages and/or disadvantage only deriving from CW location. Hence, it is assumed that the logistics benefits of the CW itself are not differential between the alternative configurations and BC and, therefore, they will be not considered.

The introduction of these assumptions allowed formulating different configurations (Figure 1), mainly differing according to the type of the facility in the low-tax jurisdiction. In the first configuration (S1) a traditional warehouse is established, while in the second one (S2) MNC decides for opening a bonded warehouse.

Both configurations (S1 and S2) offer pros and cons. A traditional warehouse enables MNCs for implementing postponement strategies, but customs duties paid on finished products which are then re-introduced in the homogeneous area are not refunded. Conversely, in a bonded warehouse goods are stored uncleared, without paying any import tax. Nevertheless, logistics costs (i.e. warehousing and handling activities) are higher and only changes needed to preserve goods are allowed. In both configurations MNCs can benefit from lower corporate income tax rate in the low-tax jurisdiction, while sustaining additional cross-country flows, higher logistics costs and higher customs duties. In addition, since low-tax jurisdiction does not belong to the homogeneous area, exchange rates and related volatility should be taken into account.

Since a bonded warehouse does not allow for making any change to stored goods, when potential value-added activities have to be performed goods need to be cleared. Therefore, S2 was further developed to cope with this issue, and the configuration S2* was introduced. S2 and S2* can be referred to as the same cross-country logistics configuration, since they both rely on a bonded warehouse in a close lot-tax jurisdiction, even if they differ according to analytical formulation. Further details will be reported in Section 5.

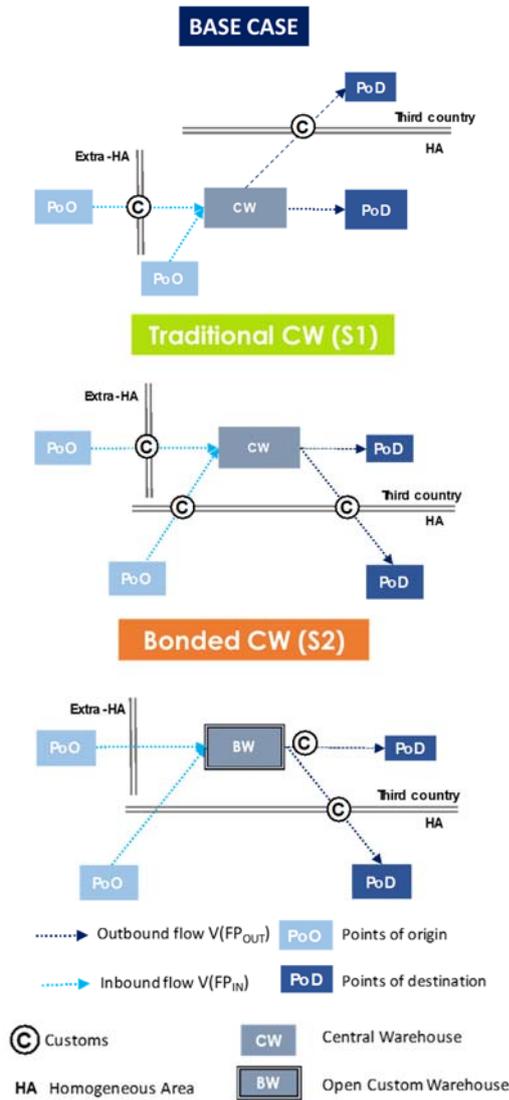


Figure 1: The proposed logistics configurations.

5. Model formulation

In line with Fernandes et al. (2015), we present a model which incorporates tax rates as exogenous parameters. We assumed that a MNC can make decisions about its distribution network, using subsidiaries or branches, under a single authority. The following main assumptions have been considered:

- (1) Return flows are disregarded;
- (2) Inventories are managed through a periodic review model;
- (3) It is assumed that MNC relies on 3PL facilities, as 3PLs are taking a relevant role in global distribution networks. Hence, initial investments are not introduced, and the service level provided by the 3PL is supposed to be constant over different countries (although the service cost is obviously changing);
- (4) Each subsidiary is assumed to be taxed on its local-source net income;

- (5) It is assumed that exchange rate doesn't vary over the considered time horizon;
- (6) Preferential origin for goods is taken into account.

The model was based on 8 operating cost items, evaluated over one-year time horizon in a business context at regime. Cost items only referred to the considered node (i.e. the CW) and to related inbound and outbound flows. Only differential costs among the proposed configurations were considered. Costs could differ according either to CW location (i.e. homogeneous area versus low-tax jurisdiction) or to CW type (i.e. traditional warehouse versus bonded warehouse). Two macro-categories for cost items were identified: operating and logistics costs, and financial and fiscal costs.

The former category included transport, material handling and inventory carrying costs. Transport cost depended on the number of FTLs per year, which in turn was function of the replenishments per year. Handling cost was computed according to the total number of pieces managed by the warehouse, while inventory carrying cost took into account cycle, safety and in-transit stocks.

The second category considered customs duties, customs brokerage fees, customs inspections, capital cost for anticipated payment of duties and VAT and corporate income taxes. Customs duties cost was given by the multiplication of duty tariff times the value of goods when it crosses borders times the flow of goods on which duties have to be computed. Customs brokerage fees cost was computed as brokerage fee times the number of customs clearance operations per year, while customs inspections were driven by the percentage of customs controls. Capital cost for anticipated payment of duties and VAT was considered according to their fiscal specifics. In particular, customs duties on imported goods without a preferential origin have to be paid immediately, and a financial anticipation is then required. Lastly, corporate income taxes were driven by corporate income tax rate.

An additional cost item was included to take into account potential value-added activities to be performed. If in BC value-added activities were not required the model compared it with S1 and S2; otherwise, it considered S2* instead of S2, and labour costs for value-added activities were included among the operating and logistics costs.

The analytical cost functions were developed from the integration of literature review and interviews with experts. For each cost item and for each available logistics configurations an analytical cost function was formulated., distinguishing between inbound and outbound processes. The cost functions were modelled using Microsoft Excel. Once entered the input data, the model returned the estimation of total after-tax profit for each strategy, allowing for separately considering any of the 19 cost items (either logistics or fiscal ones).

Due to space limitations, we report as an example the customs duties cost function for goods imported in the homogeneous area in S1:

$$CDC^{S1} = Q_{OUT} * DT * PV$$

Being:

- Q_{OUT} : annual outbound flow entering the homogeneous area without a preferential origin [pieces/y].
- DT : duty tariff of the considered product category [% of the product value].
- PV : value of finished products when they cross the border (including transport cost from the CW to the border) [€/piece].

6. Model application

We tested the application of the model with a real case. The case was characterised by a MNC operating in the fashion industry and distributing in the European market from a CW located in Northern Italy. We considered the opportunity to shift the CW location to Switzerland (i.e. a close low-tax jurisdiction). MNC could manage both components and finished products in the bonded warehouse: finished products were stored uncleared, while components were imported. Therefore, the need for performing additional value-added activities arises, and thus the comparison was carried out among BC, S1 and S2*. To assure the required confidentiality, the parameters used in the model were properly adapted.

6.1 Results

The model implementation was first intended to evaluate the economic suitability of the MNC current strategy. It considered logistics, financial and fiscal costs and the incidence of each cost item previously described. In order to take into account Swiss peculiarities, further assumptions were tailored to the model (e.g. Deloitte, 2015; OECD, 2017). Figure 2 shows that BC total cost is more than 50% higher than S2*. Since also S1 is more suitable than BC, both cross-country logistics configurations significantly outperform BC.

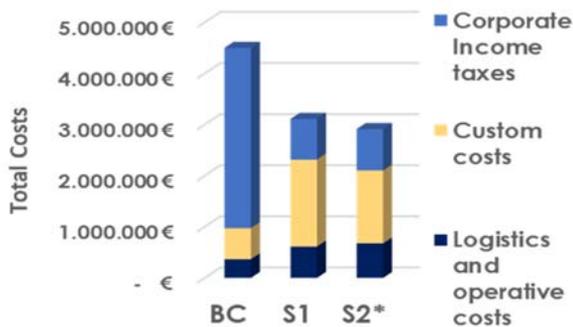


Figure 2: Model application: cost structure

The high cost difference emerged is due to corporate income taxes. The sum of logistics and customs costs is significantly lower in the BC. However, taxes to be paid in the BC are almost five times more since Italian tax rate is 32.3 % and Swiss one is 8%. Hence, corporate income taxes incidence on the total cost is 78% for BC, while it is only 26% and 28% for S1 and S2*, respectively. Looking at logistics costs only (Figure 3), BC would be the best configuration.

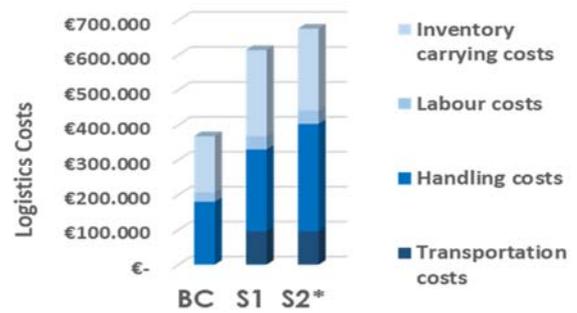


Figure 3: Model application: Logistics cost structure

Specifically, handling and labour costs are respectively 71% and 40% higher in S1 and S2* due to the higher Swiss unitary tariff. Then, the additional differential transport cost for the cross-country configurations affects the results. As regards the inventory carrying cost, it is 46% higher for S1 and S2* with respect to BC. Although the storage cost per unit is higher (almost double) for cross-country solutions, inventory value in the Swiss warehouse is slightly lower, because customs duties due in the EU are not paid yet. Obviously, this conclusion is highly dependent on the percentage of product benefiting from a preferential origin for the EU. Finally, the customs cost consists for more than 99% of customs duties. For S1 and S2* customs duties are three times and two times and a half, respectively, higher than those for BC.

The model application confirmed that cross-country solutions can be valuable for MNCs. Adopting a mere logistics perspective, shifting logistics facilities in Switzerland would rarely be justifiable, due to the high Swiss logistics costs and additional cross-countries flows. However, MNCs could benefit the Switzerland central position in Europe, the Swiss tax system, its economic and political stability and take advantages from its trade agreements with the European Union.

6.2 Sensitivity analysis

A sensitivity analysis was performed to understand the robustness of the identified optimal solution. We considered those parameters that literature offers as the most relevant: annual demand, product value, operating expenses, exchange rate and corporate tax rate. Due to space limits, we present only the main evidence from this analysis. As an example, sensitivity analysis with reference to annual demand is reported. Parameter range variation was considered among 50,000 and 750,000 units/year.

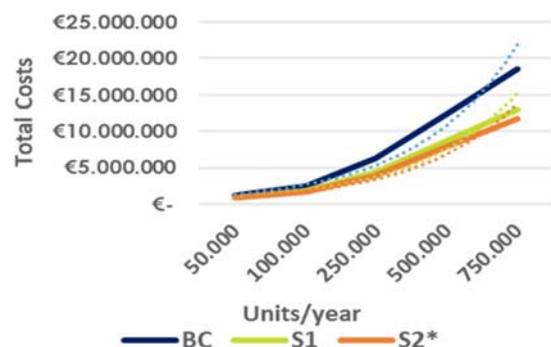


Figure 4: Impact of annual demand on total costs

As for Figure 4, S2* is the cheapest solution for any demand value. A change in the overall flows does not affect solution suitability, while cost difference increases with the demand. To increase analysis reliability, the coefficient of determination (R^2) to each exponential trend line was computed. Being R^2 higher than the 98,5% in each trend line, it confirmed a different exponential trend among BC, S1 and S2*. Therefore, although in the model application S1 and S2* could appear similar in terms of costs, the increase in demand shows that S2* should be preferred. Total cost exponential trend is driven by corporate income taxes and customs duties, whereas the other logistics costs increase linearly with the demand. Actually, the transport costs increase at step, due to the cyclic saturation of the new FTLs required to fulfil the demand increase. Hence, the different exponential trend can be explained by examining the incidence of corporate income taxes (CIT) and customs duties. Specifically, for BC the corporate income taxes significantly impact on total costs, while for S1 and S2* customs duties impact more on total costs. However, customs costs of the cross-country solutions are just one half of the CIT of BC (Figure 5).

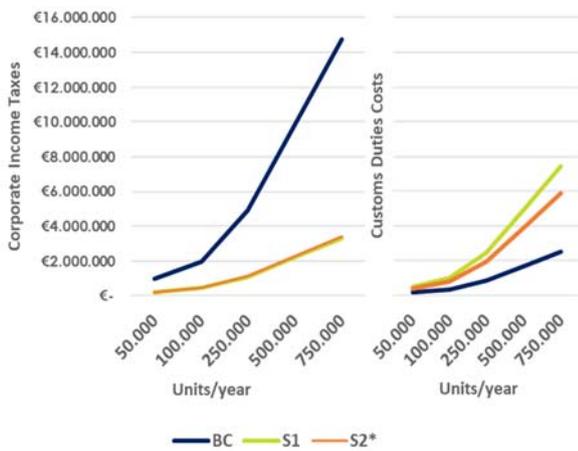


Figure 5: Impact of annual demand on corporate income taxes and customs duties costs

As for the other parameters, Table 1 reports the identified threshold values for switching from BC to S2*. As a matter of fact, S1 is always dominated by S2*. As previously reported, annual demand does not affect the choice, while S2* is preferable with refer to BC when either product value is higher than 115 €/unit, operating expenses are lower than 56% of the revenues, the exchange rate is lower than 0.93 €/CHF or the Swiss corporate tax rate is lower than 24%.

Table 1: Threshold values for the considered parameters to change logistics solutions

Parameter	Threshold value	Unit of measure
Annual demand	-	Units/year
Product value	115	€/unit
Operating expenses	56	%
Exchange rate	0.93	€/CHF
Swiss corporate tax rate	24	%

A particular attention should be devoted to corporate income tax rates, which highly affect configuration selection. As it has been shown, the corporate income tax rate in the low-tax jurisdiction is significant lower (8% versus the 31.3%). Swiss corporate tax rate was varied from 8% to 30%. Results are showed in Figure 6.

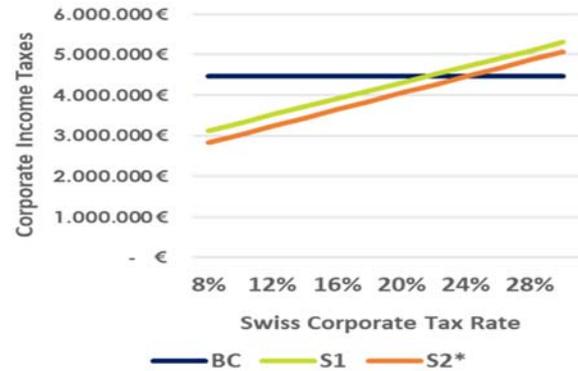


Figure 6: Impact of Swiss corporate tax rate on the total cost

BC total cost was obviously independent from variations in the Swiss corporate tax rate, while CIT increased for S1 and S2*. 24% is the threshold value, where BC becomes more cost-effective. Hence, the higher logistics and customs costs of cross-country configurations are compensated only with a tax rate difference of at least 7%. Finally, in order to extend the results, a further analysis was computed by simultaneously changing both Italian and Swiss corporate tax rate.

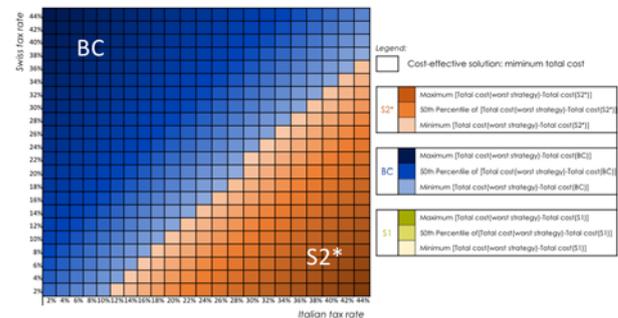


Figure 7: Cost-effective solution per combination of corporate tax rates

As Figure 7 shows, S1 is always outperformed by BC or S2*. The switch point between BC and S2* is on an almost straight line. Obviously, the higher the difference in tax rates, the higher the cost-effectiveness of a cross-country strategy.

7. Conclusions

The present research provides some insights into how companies can re-design their distribution configurations when taking into account fiscal issues. We investigated the available configurations in GDND, focusing on a location problem for a single distribution layer. More in detail, we considered shifting the optimal logistics location of a multinational corporation (MNC)’s central warehouse (CW) in a close low-tax jurisdiction. Since this solution may drive additional cross-border transport, it was assumed that

the current CW and the low-tax jurisdiction were close one another.

Two network configurations were formalised and modelled: although both configurations involved cross-country flows, they diverged according to facility type (i.e. traditional warehouse vs. bonded warehouse). To enable a quantitative evaluation of the identified distribution configurations, a cost-based model was developed. The model offers an integrated approach between logistics and fiscal issues, since it combines logistics and fiscal cost functions, with the aim of maximising after-taxes bottom-line results. We tested the application of the model in a real case, i.e. a MNC operating in the fashion industry and distributing in the European market from a CW located in Northern Italy. We considered shifting CW location to Switzerland (i.e. a close low-tax jurisdiction) and compared after-tax profit for the two above-identified alternative configurations with the current scenario. Lastly, a sensitivity analysis was performed. Results confirmed the impact of taxation on GDND, and highlighted the importance of including fiscal issues when designing global distribution networks. A cross-country logistics configuration may turn out as the most suitable if the reduction in corporate income taxes overcomes the increase in logistics cost. As a consequence, corporate tax rate emerges as the main element driving network design.

Results present both academic and practical implications. From an academic viewpoint, the present study contributes to the emerging research stream of integrating fiscal issues in GDND. Results are also useful for companies to properly re-structure their distribution configurations by including a fiscal perspective. Companies willing to adopt a “cross-country” logistics configuration can gain useful insights into how to assess costs and benefits. In particular, when maximising after-tax profit it may be preferable to have higher costs and a lower corporate tax rate, instead of having lower costs and a higher tax rate.

As the main limitation of the study, it should be noted that we focused on a location problem on the first distribution network layer, while it may be interesting to extend the research by considering the overall global distribution network configuration. In addition, the results presented in this paper only refer to the specific case under examination. Further studies may be required to improve the generalizability of the achieved results.

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References

- Balaji, K., & Viswanadham, N. (2008). A tax integrated approach for global supply chain network planning. *IEEE Transactions on Automation Science and Engineering*, 5(4), 587-596.
- Cho, J., & Kang, J. (2001). Benefits and challenges of global sourcing: Perceptions of US apparel retail firms. *International Marketing Review*, 18(5), 542-561.
- Choi, K., Narasimhan, R., & Kim, S. W. (2012). Postponement strategy for international transfer of products in a global supply chain: A system dynamics examination. *Journal of Operations Management*, 30(3), 167-179.
- Creazza, A., Dallari, F., & Melacini, M. (2010). Evaluating logistics network configurations for a global supply chain. *Supply Chain Management: An International Journal*, 15(2), 154-164.
- Dornier, P. P., Ernst, R., Fender, M., & Kouvelis, P. (2008). *Global operations and logistics: Text and cases*. John Wiley & Sons.
- Fernandes, R., Pinho, C., & Gouveia, B. (2015). Supply chain networks design and transfer-pricing. *The International Journal of Logistics Management*, 26(1), 128-146.
- Häntsch, M., & Huchzermeier, A. (2016). Correct accounting for duty drawbacks with outward and inward processing in global production networks. *Omega*, 58, 111-127.
- Harrison, T. P. (2001). Global supply chain design. *Information Systems Frontiers*, 3(4), 413-416.
- Henkow, O., & Norrman, A. (2011). Tax aligned global supply chains: Environmental impact illustrations, legal reflections and crossfunctional flow charts. *International Journal of Physical Distribution & Logistics Management*, 41(9), 878-895.
- Lee, H. L. (2010). Global trade process and supply chain management. *A Long View of Research and Practice in Operations Research and Management Science*, 175-193.
- MacCarthy, B. L., & Atthirawong, W. (2003). Factors affecting location decisions in international operations—a delphi study. *International Journal of Operations & Production Management*, 23(7), 794-818.
- Mangiaracina, R., Song, G., & Perego, A. (2015). Distribution network design: A literature review and a research agenda. *International Journal of Physical Distribution & Logistics Management*, 45(5), 506-531.
- Mariel, K., & Minner, S. (2015). Strategic capacity planning in automotive production networks under duties and duty drawbacks. *International Journal of Production Economics*, 170, 687-700.
- Meixell, M. J., & Gargeya, V. B. (2005). Global supply chain design: A literature review and critique. *Transportation Research Part E: Logistics and Transportation Review*, 41(6), 531-550.
- Norrman, A., & Henkow, O. (2014). Logistics principles vs. legal principles: Frictions and challenges. *International Journal of Physical Distribution & Logistics Management*, 44(10), 744-767.
- Seppälä, T., Kenney, M., & Ali-Yrkkö, J. (2014). Global supply chains and transfer pricing: Insights from a case study. *Supply Chain Management: An International Journal*, 19(4), 445-454.
- Van Hoek, R., Ellinger, A. E., & Johnson, M. (2008). Great divides: Internal alignment between logistics and peer functions. *The International Journal of Logistics Management*, 19(2), 110-129.
- Webber, S. (2011). The tax-efficient supply chain: Considerations for multinationals. *Tax Notes International*, 61(2), 149-168.