FINANCIAL MANAGEMENT IN SUPPLY CHAIN AS CROSS-CULTURAL COMPETENCE

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Abstract: Global character of supply chains imposes on its participants contacts in highly differentiated cultural context. Culturally-led background of business models results in different practices in everyday management of operations in supply chains, among others also in differences in financial management. To be prepared for the cooperation in other cultural milieu, supply chain managers need to be aware of those differences, and to acquire the cross-cultural competence in the financial domain.

Three mains culturally formed models of supply chain financing: Chinese, Muslim and European need to be understand and cross-culturally applied to enhance the ability of supply chain managers to support successfully in the international exchange. The text aims to describe the aforementioned models and to explain its consequences for supply chain financing.

Keywords: supply chain finances, cross-cultural competence, international exchange

Słowa kluczowe: finanse łańcucha dostaw, kompetencje międzykulturowe, wymiana międzynarodowa.

Introduction

The global reach of supply chains impacts from decades domestic economies, leading to deep transformation of their structures. Regional concentration of industries supplying worldwide values' chains (South-East Asia, North Africa, Latin America) results in technological, financial, and social growth with dynamically changing distribution of profits and competences along supply chains.

The expansion of supply chains as interorganizational structures focused on performance increasing of the dominant companies gave the chance to the involved

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low-cost countries (LCC), hosting orderings or investments (green or brownfield), to access newer technologies and necessary capital to develop manufacturing capacity. With intelligent support of domestic governments, such countries attired incoming capital and issuing knowledge to leverage quicker transition to industrialization stage (as i.e., namely "Asian Tigers" in 80'). Geographical distance between production and distribution zones, created pressure and opportunity to logistics sector development, along with desire to access such profitable value-creating structure as supply chain fueled interest in lowering trade barriers worldwide (Anderer, Dür, & Lechner, 2020; R. S. Martins, Siegler, Souza-Junior, Flynn, & G. S. Martins, 2019).

Not all promises of globalization were accomplished, but deeper understanding of its pros and cons (especially with such unexpected but enlightening experience of global relationships reliability, which becomes the COVID-19 disease), let us consider challenges and determinants of actual situation, in a more realistic way. The challenges remain connected to a quest of better performance of global exchange with fairer distribution of profits, which should leverage overall development of trading countries. As for determinants – one of those is the exposition to other cultures, more important then in any other epoch, with the involvement in global trade and supporting it global supply chains of larger set of economic actors. That appeals to develop necessary competences through the formation of global supply chain and global trade staff.

The goal of the present paper is to describe three culturally-led models of supply chain financing (SCF), which are: Western (conventional), Muslim and Chinese, intertwining along supply chain flows, as well as their impact on supply chain functioning. It must raise awareness of cross-cultural competences role in the SCF activities and attire attention to the gap, existing in the literature, only incidentally exploring the topic.

The paper consists of three parts, from those the first refers to the basic concept of supply chain financing and resulting competence requirements. In the second the aforementioned SCF's models are reported along with its consequences for the functioning of SC. The final part covers proposed framework of cross-cultural competences required in global SCF with concluding remarks on further research directions.

Financial dimension of supply chains functioning

Supply chain as a model of organization for flows of goods, information, and finances, composed from cooperating companies, can differ in scope from domestic to international or global reach. Build on relational basis between companies supporting flows which constitute supply chain, requires optimization through an interdisciplinary management concept, namely supply chain management (Pfohl & Gomm, 2009). Financial flow in supply chain attired attention of researchers by early XXI century which materialized in the term "supply chain finance" (SCF). With focus on exploratory, and further - explanatory research, the scientific contribution from last 20 years provided clarification of supply chain financial reality (Pfohl & Gomm, 2009; Templar, Hofmann, & Findlay, 2016, pp. 253–292; Hofmann & Sertori, 2020; Jia, Blome, Sun, Yang, & Zhi, 2020), but in the same time revealed existing gaps to be fulfilled.

Hans Ch. Pfohl and Moritz Gomm reported in 2009, the gap consisting in insufficient contribution on reducing the cost of capital by SCM. For Simon Templar, Erik Hofmann, and Charles Findlay in 2016 the global dimension of SCF has to be revealed – the observation which inspired the present work. This year Hofmann and Sertori brought to light the problem of profits distribution in SCF. In the same 2020 Fu Jia et al. unveiled the disparity in SCF literature, arising from its incongruent theoretical basis, and proposed to complete it by information processing theory as common foundation. Although detected gaps resulted in noteworthy contributions, it should be observed that its presence remains typical for such relatively early stage of concept development.

The central question of optimization in supply chain financial flow results in diverse approaches distinguished by Pfohl and Gomm:

– financial supply chain – understood as the flow of financial resources, which management aims to optimize its determinants: inventory level (to be reduced), as well as cash level - through the optimal timing of physical activities and thus its financial counterparts (receivables and payables);
– supply chain finance – referring to control and optimization of financial flows induced by logistics, which comprise inventory management, handling of logistically induced financial flows and supporting processes (i.e., insurance management for logistics activities);
– logistics financing – which covers financial services offered in the complement to the basic services by logistics providers, such as i.e., financing or leasing logistics real estate;
– financial chain management (FCM) – induced by the software use (SAP AG) as "sum of the financial flows in and across companies" and focusing on processing side of financial processes with collaborative and automatic transactions use. As Pfohl and Gomm underline - that approach contrasts with the concept of SCF.

The choice of approach impacts performance and value creation processes. Financial supply chain or financial chain management approaches (in the narrow sense also logistics financing) aim to increase financial performance of the supply chain but can limit value offered to the customer (Banaszyk, 2019). Supply chain finance, and in a wider sense also logistics financing, implies process perspective, where financial flow is considered as the result of logistics activities engaged by the company. That allows to optimize value for both companies and customers, which is already challenging task for a single company. The complication rises in such complex structure as supply chain, leading to supply chain financial bullwhip effect (Vousinas, 2019) and financial spillover effects (Hofmann & Sertori, 2020). They provided arguments for a nuanced view on participation in supply chain, proving mixed up results obtained by its other members than leader. Noteworthy is also the method used by Hofmann and Sertori with interesting research framework established and validated in their study, useful to decisionmakers and scientists.

Concise framework of SCF proposed by Pfohl and Gomm (2009) include actors, objects, and levers. As actors they distinguish primary and supportive members of SCF amid those latter they list capital and financial services providers. Among objects they enumerate assets and net working capital, also referred as cash-to-cash-cycle (C2C), symptomatic for healthy financial situation of company and overall supply chain (Hofmann & Sertori, 2020). To the levers they counted the volume of financing needed to provide assets necessary in supply chain activity, duration of asset financing period and the capital cost rate, which all directly impacts the performance of SCF.

Fu Jia et al. offer wider conceptual framework of SCF, founded on information processing theory, as a platform housing and completing other theoretical contributions. That proposition includes the requirements of SCF providers, by the same it introduced the view of overall performance achieved by all supply chain members. This study is also interesting from competence perspective, because the components of the proposed framework can be easily converted into group of skills necessary to improve SCF functioning.

For the present paper most valuable is the input provided by Templar, Hofmann, and Findlay (2016), which highlight culture's dimension and its future rising in importance with the SCF referring to Islamic and Chinese financing systems.

SCF models culture-led typology

Culture is considered in the institutional economy approach as one of the driving forces of country development (Acemoglu, Johnson, & Robinson, 2005). It is due to externalities such as confidence, reliability on the word of partner issuing from the same culture and related values – loyalty and truthfulness (Bernat, Bruska, & Jasińska-Biliczak, 2017). On more basic level, according to M. Crozier – it *helps people solve problems and resolve dilemmas*, shaping the way they act and interact with others. The cultural background understood as "socially operative system of rules" (Hodgson, 2019) is then present in all economic institutions, including SCF practices. And a particular institution (like used SCF model) spread depends on – among others – demographic potential of each culture.

In 2050 horizon the dominance of Western culture will be balanced in global scale by growing population with Chinese and Islamic culture background. That means rising in importance of all their institutions shaping also the SCF domain (Templar et al., 2016, pp. 253–292). This prompts to try to understand the particularity of these institutions and consider the development of necessary skills that will allow them to use such skills in practice and implement them by appropriate training of specialists for SCF.

In the cited framework by Pfohl and Gomme, supportive members in SCF represent institutions providing financing for supply chain processes and assets. Those institution can have formal and informal character, delivering financial resources from internal or external sources (Fig. 1.). As for internal sources they can generate resources through optimization of objects management (assets and working capital – namely C2C cycle – better management) (Hofmann & Belin, 2011). External sources come down to financial institutions or non-professional capital providers, which offer better conditions to the network members, allowing reduction of weighted average cost of capital (WACC) for all networks. When the external source provides securitization services those services become accessible also from outside network to discount the scale effect. Which is worthy notice that is the relation of external – internal entity in the supply chain context (Banaszyk, 2019), where funding can be provided by rich-in-capital members to the constrained ones, to help them maintain or develop business activity (Gelsomino, de Boer, & Steeman, 2017; Pfohl & Gomm, 2009).

Source of fund	**User of fund**	
	INSIDE NETWORK	**OUTSIDE NETWORK**
INTERNAL	C2C use for satisfying capital needs	Not applicable
EXTERNAL	Supply chain financial platform for reduce WACC	Securitization solutions (on trade or freight)

Figure 1. Types of financial relationships in the SCF

Source: based on (Templar et al., 2016, pp. 264–265).

Taking the above into account, when describing the phenomenon of culture implication for SCF, we should consider all kinds of institutions (*sensu largo*) that take part in financing provision for supply chain operations. In line with this, we should describe the financial sector as formal external actor of SCF as well as practices guiding the access to informal funding of activities. The issue of internal funding solutions, as highly depending on individual performance of supply chain members, will not be raised.

Then culture impact on economy will manifest by characteristic institutions that represents locally existing values and rules (norms) systems (the case of Islamic countries) and by the adoption of institutions coming from abroad, which are interpreted and exploited through the lenses of own culture (Chinese case).

Referring to the Islamic model of financing institutions we must notice that both of them are shaped with basic principles derived directly from the Quran. All activities then must be Halal (in Arab – permissible or lawful) and have its place in Shariah system (Templar et al., 2016, pp. 253–292). This latter is a basic Islamic legal system translating Quran prescriptions of decent life into a universe of ideas which must be understood and applied in societal life.

Legal in Shariah perspective banking institution fulfills *fiqh al-mu'amalat* (being part of Islamic trade law) which means that it must be free from interest (*riba*), uncertainty (*gharar*) and gambling (*maisir*) or any non-halal elements (Templar et al., 2016, pp. 253–292). Those warrants are difficult to stay connected with conventional (Western) financial practice (Tab. 1), so in most Muslim countries in use are two banking accounts – one for each system.

To conform with the halal rules, Islamic banking systems developed three distinct solutions, two of them are profit-loss sharing (PLS) oriented (*Mudaraba* as a strong PLS form, and *Murabaha* as weak PLS product) and the third is a form of pre-paid forward sale (*Salam* financing). Their application impacts directly business partners performance, as in *Mudaraba* the capital provider is responsible to cover losses alone, whilst in case of profit making, it is shared between all partners according to split agreed in the contract. *Murabaha* omits that problem by introducing bank into the contractual relation as a capital provider and intermediate buyer of the good contracted. In this solution bank buys the good and immediately resells it to the customer, receiving a mark-up from customer in with repayment of initial price. Not being real *halal* form, is in use in Islamic banking (Templar et al., 2016, pp. 253–292).

Salam financing gives to the supplier (or the agent) access to the capital necessary for produce (or buy) contracted commodity. It requires precise information on due date and price where good will be provided and the transaction finished. The bank can be involved into transaction, but it can be also settled directly between customer and supplier. As the good is recompense for money transferred, such financing form is considered being halal.

Islamic banking is challenging for business partners, because of moral and ethical obligations to fulfill (halal rules) which means larger performance criteria than only commercial success. Also, if one element of supply chain is not halal then all chain becomes non-halal. Templar, Hofmann, and Findlay (2016) see as opportunity, the fact, that in Islamic banking equity and debt are not distinguished, which

Table 1. Comparison between conventional (Western) and Islamic banking

Specification	Conventional banking	Islamic banking
Money perception	Money is a product. Besides medium of exchange, it is a store of value	Real asset is a product. Money is just a medium of exchange
Profit source	Time value is the basis for charging interest on capital	Earning profit derives from profit on exchange of goods and services
Money market usage	The expanded money in the money market, without backing the real assets, results in deficit banking	Balance budget is the outcome of no expansion of money
Interests accounting	Interest is charged even in case the organization suffers losses (any loss sharing)	Loss is shared when the organization suffers loss
Disbursing principle	While disbursing working capital finance, no agreement for exchange of goods or services is made	While disbursing funds under *Murabaha* and *Salam*, an exchange of goods and services must be executed,
Real and financial market relation	Due to non-existence of goods or services behind the money, while disbursing funds, the expansion of money takes place, which creates inflation	Due to existence of goods or services no expansion of money takes place and thus no inflation is created
Inflation phenomenon	Due to inflation the entrepreneur increases prices of goods or services, as the cost of the product covers the inflationary effect	Due to control over inflation, no extra price is charged by the entrepreneur
Lending principles	Bridge financing and long-term loans lending is not made on the basis of existence of capital goods	Agreements are made after making sure that the capital goods exist and before disbursing funds for a capital project
Lending at governmental level	Government very easily obtains loans from central bank through money market operations. There is no need to initial capital development expenditure	Government cannot obtain loans from the monetary agency without making sure that they deliver goods to the national investment fund
Impact of banking principles on GDP	Debt's financing has the advantage of leverage for an enterprise, due to interest expense as deductible item from taxable profits. This causes huge burden of taxes on salaried persons. It severely affects the saving and disposable income of the people. This decreases the real GDP	Sharing profits in case of Mudaraba provides extra tax to federal government. This leads to a minimization of the tax burden over salaried persons. This increases the savings and disposable income of the people, which increases the real GDP

Source: adapted from (Templar et al., 2016, p. 273).

on the one hand rise costs of customer diagnosis (*know your customer* KYC costs), but on the other motivates both parts to cooperate more closely than in conventional financing relationship.

When it comes to find financial covering for supply chain activities, Islamic financing by its restrictive character and legal enforceability can be challenging for internal financing inside network in case of non-respect of payment terms. Then the penalties nor interests are not admitted, and the law intervenes to enforce payments, which can be seen as risky by the borrowers. The same risks arise for situation of economic downturn and issuing risk of capital shortage – partners must renegotiate terms in such way to warrant profits for both parts (if not, *Mudaraba* – the strong PLS form can dramatically change situation of capital-rich partner).

In inside network external financing situations, the *Murabaha* product are best suited, with intermediary financing provider, receiving its mark-up conformingly to wider interpretation of halal and shariah rules. In such situation the necessary conformity of all SCF members to halal rules can be limiting, but – companies and banks intensively working with Muslim countries – funds their branches or agencies fully conformed to local principles.

In contrast external financing of external network in Islamic environment is not possible with the strict respect of halal rules, because of uncertainty, sometimes also gambling and discontinuity of flow of goods and money (Templar et al., 2016, pp. 253–292).

Chinese financing system offers more adaptive approach to the foreign economic institutions inculturation. It is fully subordinate to the economic policy defined by communist party authorities governing the country, making from China a kind of mega-corporation, managed in accordance with the long-term objectives set by its rulers. In fact, those goals were exposed in 2018 with strategy aiming to transform China into innovative country by 2025 (in 10 key sectors), to secure foundations of domestic economy by 2035 and build global influence of PRC toward 2050 (China's grand strategy in a new era | East Asia Forum).

State domination in the economic field and the maintain of so called "Chinese way to modern socialism" have already proved its limitations, maintaining market mechanisms in immaturity (Liu, Zhou, & Wu, 2015), despite the admission of private entrepreneurship. Problems rely on preference toward state-owned institutions (e.g., banks, enterprises) which results in non-performing activities (i.e., loans) and systemic risk for financial system (Tab. 2). State intervention as for maintain low interest rates for deposits and loans, combined with traditionally high savings rates by individuals, translates to a high share of self-financing, or peer-to-peer lending and "shadow banking" in financing investments or current operations, which can be seen as culture-led institutions. Gaps in the legal system (i.e., lack of rules on bankruptcy enforcement), innovativeness of fintech and non-transparency in loans granting, prompts private SME to look for alternative funding, bypassing formal banking sector often overly indulgent towards SOE (Templar et al., 2016, pp. 253–292).

Table 2. Comparison between conventional (Western) and Chinese banking

Specification	Conventional banking	Chinese banking
Financial system structure	Many private and state-owned banks. Not limited number of financial institutions	Small number of state-owned banks. Limited number of financial institutions
Regulatory power	Banks regulate interest rates	Government regulates interest rates
Deposits attractor	Bank deposits and other financial instruments are based on risks	Interest rate controls on bank deposits
Political impact on financial system	There is just indirect political influence. If at all central banks have certain impact	Political influence on state-owned banks has led to a bias in credit allocation towards state-owned enterprises
Loan function	Firms with a better performance are more likely to receive bank loans	Firms with a poorer performance are more likely to receive bank loans
Central bank function	Goal of the central bank is to fight inflation	Goal of the central bank is to maintain the stability of the domestic currency Renminbi, provide capital to the economy and support key industries – promote economic growth
Government mandate	Political legitimation by voting	Legitimation by hard economic facts
SOE crediting	Credit rating of the SOE does matter	Credit rating of the SOE does not matter
Capital market characteristics	Professionalization of the capital market with diverse opportunities to get financial resources (e.g., "crowdfunding")	Huge shadow market and underground lending

SOE – state-owned enterprise.

Source: (Templar et al., 2016, p. 259).

In such circumstances, the potential of SCF is enormous – as assert Templar, Hofmann, and Findlay (2016) – if it could deliver liquidity at lower cost, comparing to relative costly P2P or "shadow economy" loans or hard-to-reach banking credits, it would generate great interest of supply chain potential partners. Also, SCF institutions can be and are adopted in Chinese culture with ease. The most popular for local suppliers are collaterals (Liu et al., 2015) in concert with the practice of advance payments (Templar et al., 2016, pp. 253–292), which induces certain risks on quality of pre-paid goods and – in capital scarce economies – risk of downturn and resulting bankruptcies. As for local distributors - prevalent long payable terms (about 180 days) granted by global MNC's to gain and strengthen their market shares, which provides financing through C2C cycle management based on payables or receivables contractual terms (Fig. 1). For inside network external financing tools lowering WACC are used – it can take form of using foreign financial services provider through SCF platform. The costs of establishing and exploiting such financial platform, can be nevertheless important and must be considered by buyers and suppliers involved. External financing assured outside network can rely on use of receivable securitization tools (on trade or on freight). Such solution is flexible and adds value to the users but stay accessible rather to big companies.

The SCF models described above represents two distinct cultures, which must be taken into consideration by supply chain members. For Islamic countries SCF model is based on the own economic institutions, derived directly form religious principles, and difficult to adapt. For China SCF is shaped by adaptive way and offers more flexible approach. Both require the knowledge and understanding of the essence of these practices, by supply chain professionals responsible for management of financial flows and its performance.

Cross-cultural competences framework for manage financial flows in global supply chains

With evident culture influence on SCF practice, as described above, it should not be neglected in the way financial flows are managed. The ability to understand and take into consideration traits of each SCF model, can be crucial for successful operation of supply chains with the rising importance of culture-specific component in its financing.

Cross-cultural competence (CCC) is one of the key competences for the global labor market along with IT competence, creative/cognitive competence, interdisciplinary competence, and social and emotional intelligence, as well as ability to cooperate in virtual multicultural teams (Przytuła, Bruska, Szymańska-Czaplak, & Tracz-Krupa, 2020). Competence as a set of requirements necessary to perform the tasks assigned to an individual (Competence & Competency Frameworks | Factsheets | CIPD), covers knowledge, skills and attitudes which are vital to attain desired effect or output, namely KSA model for competency analysis (Kovács & Pató, 2014).

Employees individual competences must come in line with the requirements of the company. If that last joins the supply chain, the larger scope of tasks will be assigned to all structural units and inside those units the responsibility of those will be transferred to the chosen staff members. An exhaustive report on logistics competences with certain inspirations for supply chain ones indicates which ones has been used to distinguish best competing companies in the flow management field. Among the competences essential to achieving top positions in logistics rankings, those connected to the financial and international aspects appeared only in to a small extent. They were located in such competences of supply chain as (Matwiejczuk, 2014):

– being part of the "Supply Chain 2000" framework (p. 173):

- relationships with suppliers – leading to benefits from financial joint ventures with suppliers,
- integration of measurement – which helps to enhance the performance of company and the supply chain in which the company participates;
- integration of relations – requiring the access to cross-cutting information on finance, operations and strategic issues granted to all supply chain members;

– included in the framework of global supply chain survey by CSC (p. 189):

- optimization of global supply chain,
- integration with clients, suppliers and inside company along with
- risk management;

– allowed in the "global excellence logistics" by Capgemini (p. 201):

- identification of key drivers, processes and activities which determine creation and supply of value in supply chain – with direct impact on profitability
- use of global supply chain resources for market success of supply chain members – manifesting in optimization of resource use.

Since then, the interest in the financial aspects of supply chain cooperation time has systematically increased as partly prove bibliometric report from Web of Science database for papers published on "financ* and supply chain" topic in the journals from management, economics, business and business finance field, having term of "supply chain" in its titles. Those were 151 from 2010 till 2020, with a rise in 2019 (26 texts) and increasing number of citations (above six hundred per year in 2018 and 2019).

In the dilemma of culture-led SCF practice, the issues are in fact multiples. Firstly, it is to consider the financial management field and its internal dynamic leading to the profession and its requirements modifications (Zarzycka, 2015). Secondly, the cross-cultural competence framework is still in development stage which can impact its contribution to the training programs and adaptability potential (Fig. 2).

CROSS-CULTURAL COMPETENCE		
KNOWLEDGE	**SKILLS**	**ATTITUDE**
– knowledge of culture, language meanings, rules of interaction (what to do and what not to do) – knowledge of social values, tradition, religion, geography, politics, customs, of the host country – knowledge of economic institutions, business practice and law particularity of the host country	– foreign language competence, effective communication, and fluency in English language, – being understood by others, – adapt and adjust to new cultural environment / new situation /new places – listening and observation skills – analyze and compare challenges and opportunities of operating in a culturally diverse environment	– learning through interaction, – behaving appropriately in intercultural situations, – adapting to the behavioral norms of a different cultural environment, – understanding others' worldviews – respect and tolerance of other individuals – understanding of culture differences in business field

Figure 2. Components of CCC and its details (related examples)

Source: adapted from (Przytuła et al, 2020, p. 210).

Thirdly, combining both is challenging and needs further research on content as well as pedagogical methods to apply.

The question arises already on organizational attribution of SCF responsibility (Jansen, 2017) between logistics & supply chain management (L&SCM) and accounting & finance management (A&FM) fields, with strong consumption of IT platform services. This results from evolution of both professions with strong focus on interorganizational relationships (Zarzycka, 2015), accurate and timely information for controlling purposes (Trzuskawska-Grzesińska, 2017) and performance optimization (Blaik, 2015). As for A&FM evolution, Ewelina Zarzycka reports the transition of management accountant responsibility from information's supplier towards direct involvement into decision's processes. Due to economy and business conditions evolution, technology advance and innovations in accountability field, companies modify and re-invent (term used in the sense used in (Giannetto, 2015)) their ways of acting empowering functional specialists as business accountants or controllers to become clients and business partners to cooperating with outsourcing companies, especially representing SSC/BPO sector.

Supply Chain Financing use although beneficial for supply chain members (Wetzel & Hofmann, 2019) modifies internal relationships between them and their relations with external stakeholders. It is to consider especially the impact on (Okrasińska, 2010):

- operations and processes subject to change due to SCF implementation:
  - how largely and profoundly modify internal processes, tasks, and responsibilities,
  - will it incite modifications in accountability system or create new financial or accountable risks,
  - how to structure purchasing, supply chain and financial processes to succeed;
- company performance:
  - will it support the company development without additional employment to financial service,
  - what impact will have SCF on the financial situation of the company;
- relations with the providers of capital (banks or internal financial system):
  - how SCF implementation would change current relationships with banks,
  - will SCF help to secure the company and its supply chain against interest rates modification,
  - will IT integration become a challenge to the company's internal financial system or partnering banks?

The competence structures used in training and education of future staff already sufficiently cover the tasks related to supply chain functions. They must be prepared – in line with the KSA model (and referring to the example of most demanding function of freight forwarder) - in terms (Kovács & Pató, 2014):

- of knowledge – to understand cost-calculation and the area of finance (bank-related operations),
- of skills – to consider cost- and time-effectiveness when planning and organizing own work
- of attitude – to function as "entrepreneur" when conceiving new business plans and networking outside the company.

This goes along with the technical and processing side of SCF, which the widening literature on this topic scrutinizes well. Nevertheless, the research on culture-led aspects appears only incidentally. Even in their cited work, Templar, Hofmann, and Findlay placed this thread in the chapter on future developments of SCF. That gap should be completed as the understanding of cultural challenges of globalization deepen as well as cultural identities of customers and companies take over - which primarily manifests in ethnocentric or engaged consumption and CSR promotion of ethnic diversity but can have consequences in focused financing and cooperation – as rigorous adoption of Islamic finance rules indicates.

That appeals to complete existing competence frameworks for supply chain involved companies as well as their employees training and education. Figure 2 shows the basic requirements in this area. To furnish the knowledge of the culture differences on the general level, the formal education period is the best option, but for specific purposes – e.g., new country partner to cooperate with – will need a focused training by the specializing practitioners and researchers. More durable results will come with the study of socio-economic institutions shaping business and legal landscape of each culturally different country. However, to provide the knowledge in this field to supply chain employees, it is necessary to clearly define the purpose of the education given in "international business" topic.

Skills claimed by employers – MNC and its partnering sectors (IT/SCC/BPO/R&D) are to consider due to its cooperation in global scale in culturally diverse environment – come down to so called "soft skills" with especially communication ease and ability to collaborate with people from diverse backgrounds. One must complete it with cognitive skills accessed by analyzing and comparing of those backgrounds strength and weaknesses to build the best solutions for supply chain management and especially for SCF.

The required attitudes rely on cultural sensibilization of employees and widening of their understanding of varied perspectives to establish consensus and build robust solutions. It needs a special training of adaptation to the culturally-led answers to typical organization and cooperation problems. As asserts d'Iribarne research (d'Iribarne, 2002), in each culture we can attain the optimization, but sometimes in (surprisingly) different manner - typical for local background. The responsible for supply chain and SCF cannot ignore the culture embeddedness of business practices they have to maneuver aiming to increase the performance of overall cooperation.

Conclusions

To the strong focus on operations, technology, and cooperation inside competing supply chain in globalized business environment, cross-cultural competence must be added which eases, strengthen, and improves relationships performance in its organizational and financial dimensions. Traditional literature review method, with "snowball" technique applied, revealed certain gap in the research on supply chain finance, which rarely refers to the culture dimension. This path should be further explored, as globalization economic phenomenon will lead to the empowerment of other than Western (conventional for business financial management) financing institution, especially rooted in culture of Islam, more restrictive than the others toward financial activity (*halal* prescription). Cross-cultural competence as general framework of knowledge, skills, and attitudes developed during formal and informal education seems well fitted foundation to enhance cultural awareness and ability to successfully cooperate with other's countries companies in supply chains.

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