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EXPLORING SOCIAL CAPITAL WITHIN DAMIETTA'S FURNITURE INDUSTRY VALUE CHAIN AS A MODE OF COMMUNITY CURRENCY

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ABSTRACT

Social Capital contributes to the development of professions as well as communities, especially in small scale urban settings with a dense interlocking social structure. Within industry-based communities, a strong Social Capital Network acts as a basis for transactions between enterprises, which strongly ties into the drivers that constitute many of today's community/alternative currency initiatives. Furniture enterprises in Damietta form the main economic base of the city, with majority of residents working in furniture-related activities, passing down their businesses through generations. This paper examines the impact of Social Capital on the nature of this industry's value chain and extent of its influence on business patterns and transactions as a driving force towards an unspoken alternative currency. This is achieved through examining Damietta's existing spatial, social and business patterns, which arise and influence the city's socio-economic industry dynamics. The paper aims at provoking arguments on geographical scale and lifestyle patterns being instrumental in the formulation of a local system of transactions based on Social Capital. The paper builds on the work of Putnam, Wallman and Porter, using interviews and GIS spatial mapping to investigate the connection between Social Capital measures (trust, networks and norms), local furniture industry value chain and socio-spatial living and working patterns in Damietta. The results reveal spatial and social connections that exhibit how Social Capital in Damietta's Furniture industry drives an unspoken currency between enterprises in the city.

KEYWORDS

Social Capital, Value Chain, Community Currency, Furniture Industry, MSMEs.

1. INTRODUCTION

In order to investigate the connections between Social Capital as a driver that brings about a set of dynamics within a small-scale industry-based city, this paper investigates how the furniture industry in Damietta functions within the context of profession-based Social Capital and the effect Social Capital has on the nature of value chain processes and transactions. The complexities that accompany the use of trust, networks and norms (Putnam et al., 1993) as a basis for many business dealings in the dense and enclosed community of Damietta adds a spatial aspect to the socio-economic setting of the city. The argument in this sense transcends economic profit and becomes mapping a specific pattern of living that evolved in the city within the context of socially based business transactions. The location of Damietta as a regional connector between Mediterranean cities and a northern gateway to Egypt was also a strong geographical factor that prompted Damietta's edge in Industry since it's early history as far back as the 7th Century (*AlShayal, 2000*).



Figure 1. Damietta Region Map: Damietta city's central location and connectivity to the Port and New Damietta city (Source: Google Earth, 2020).

The research builds on the hypothesis that Social Capital is correlated with market control and business success in the industry; enterprises with higher connectedness in terms of trust, network and norms (Putnam et al., 1993) are expected to exhibit higher “control” in the market (*Lin, 2001*). In relation to community structure, its definition of open or closed (Wallman, Vidali, Lo Conte, & Bond, Virginia, 2018) is also a reflection of the nature and magnitude of the implications of densely prevalent dimensions of Social Capital on what could be exhibited as an inherent community currency. The paper foresees that the dynamics of the furniture industry in Damietta would be highly affected by its long-term Social Capital between furniture industry enterprises, resembling an unspoken currency within business transactions. The paper also envisages that within a closed community such as Damietta's, with higher bonds and less bridges or links (*Gittell & Vidal, 1998; Hunt, Durham, & Menke, 2015; Szreter, 2002; Szreter & Woolcock, 2004*), the adoption of Social Capital would give an advantage to the whole furniture industry cluster in the city (*Porter, 1990*), yet it might show negative drawbacks on the status of the industry in the global market (Wallman et al., 2018).

2. BACKGROUND AND THEORETICAL UNDERPINNING

This paper builds on the works of Putnam (1993, 2002), Coleman (1988, 1990), Lin (1999, 2003), Bourdieu (1986), Hunt (*Hunt et al., 2015*) and Burt (1992, 2015) to investigate the theoretical underpinnings that relate to Social Capital in literature. Wallman's model of Social Network Structure (*Wallman et al., 2018*) is also discussed in terms

of understanding the nature of the existing social model in the context of Damietta's furniture industry. The work of Ruddick (Dissaux & Ruddick, 2017; Ruddick, 2015; Ruddick, Richards, & Bendell, 2015) has guided the theoretical base for understanding grassroots economies and Social Capital as an alternative currency, in addition to Porter's Competitive Advantage Theories, which would consider Damietta as an economic cluster (Porter, 1990). The work of Blanc (2011) as well as publications by CCIA (Community Currencies in Action) (2015) and Grassroots Economics (2019) were the base of investigating CCs (community currencies) and their position within the context of the study.

2.1 Grassroot Economics, Competitive Advantage and Community Currency

"Grass-roots Economy – We Work Together" was written on the Bangladesh Business Network (BBN) Committee vouchers (Ruddick et al., 2015), which illustrates the concept of what "grassroot" signifies. Grassroot economies operate on a small scale (formal and informal), giving way to a more sustainable economic pattern that fits smaller societies (Ruddick et al., 2015). Examples from Bangladesh and Kenya have adopted projects that capitalise on small scale economies and introduce the concept of alternative currencies.

The concept of alternative currencies, community currencies or "social money" (as frequently called in Latin-speaking countries) started in the 1980s and evolved in definition and typologies (Blanc, 2011) and the attempt to identify its typologies depended on the type of "project" or context in which the CC arises. **Error! Reference source not found.** shows the types of projects, according to which CCs differ in nature and direction of use, namely: 1) local currencies (territorial projects), 2) community currencies (community projects) and 3) complementary currencies (economic projects). Each scheme proposes a centre of focus around which the CC is generated and used (**Error! Reference source not found.**). However, these typologies are "ideal" (Blanc, 2011) in the sense that they rarely occur in isolation. They frequently overlap and take place within complexities of all three aspects of market, community and space. Hence, Blanc (2011) identified the evolution of complexities of CCs in societies since 1980 including examples such as timebanks and the SOL experience in France.

Circling back to Damietta's furniture industry local enterprises, Social Capital in this context falls under a mostly complementary typology with G4 (a generation of mostly complementary currencies that focus more on the market needs as a driver and builds on partnerships towards economic activities and benefit (Blanc, 2011)) – as in **Error! Reference source not found.** below. The reliability of networks and trusted individuals in business transaction prioritisation is equivalent to (and sometimes more valuable than) skills or monetary assets. Even though Damietta's Social Capital does not satisfy the conditions of a CC as it was not initiated as a model or taken forward by the community or local government, there is a strong alignment between the targets and mechanisms that CC models take forward, and the mechanisms according to which trust and networks work within Damietta's furniture industry.

From the collective city economy perspective, Porter argues that competitive advantage is created and sustained through a highly localised process, where competitive success is a reflection of differences between competitors in culture, economic structure and history among other factors. Within the same line of thought, competitiveness of a cluster first and foremost depends on the capacity of its industry to innovate and upgrade, hence it is achieved through acts of innovation (Porter, 1990). Reflecting on Damietta's market, the inherent identity of the furniture industry and the interconnected social, spatial and economic cycles between the businesses, as well as the cultural correlation between the city and the industry in the wider consumer background in Egypt; are all factors that can be highly utilised as catalysts (as well as assets) for creating a sustainable competitive cluster based on local economies. In Damietta, the culture of spillover and local buzz is inherited through generations of residents working and exchanging knowledge on the "craft" for decades.

Table 1. Ideal types of community currency schemes

Nature of the Project	Space considered	Purpose	Guided Principle	Denomination
Territorial	Geopolitical space (territory politically defined)	Defining, protecting and strengthening a territory	Redistribution or political control	Local currencies
Community	Social space (pre-existing or ad hoc community)	Defining, protecting and strengthening a community	Reciprocity	Community currencies /
Economic	Economic space (production and exchange)	Protecting, stimulating or orientating the economy	Market	Complementary currencies

Source: (Blanc, 2011)

Table 2. Ideal type fo community currency schemes

Generation	Significant cases	Currency scheme types	Guiding principle	Content overview
G1	LETS, trueque, CES	Mostly community	Reciprocity first; various distance to market	Inconvertible schemes; quite small openness to external economic activities
G2	Time banks, Accorderie	Community	Reciprocity first; various distance to local governments Market	Inconvertible schemes with time currencies; frequent partnerships, especially with local governments
G3	Ithaca Hour, Regio, Palmas, BerkShares	Local and complementary	Market first; generally distant from local governments	Convertible schemes; local businesses are included; interest of partnerships with local governments
G4	NU, SOL	Mostly complementary	Market first, with links to governments and reciprocity	Complex schemes oriented toward consumer responsibility or / and economic activities re-orientation and other purposes; partnerships are necessary

Source: (Blanc, 2011)

2.2 Social Capital as a System

The concept of Social Capital can simply be explained as “investment in social relations with expected returns” (Lin, 2001), which is highlighted in various ways in the works of Putnam (1995, 2002), Coleman (1988), Lin (2001) and Hunt (Hunt et al., 2015). This implies that engaging in networking interactions produces profits. In other words, Social Capital means/implies/signifies “resources embedded in relationships among actors” (Hauberer, 2011).

Social Capital has evolved as a concept through the works of different theorists. Although Bourdieu’s (1986) work includes discussion on cultural capital theory, he also provides a structural view explaining and aggregating Social Capital, one which focuses on the size and volume of the capital possessed by members, and how the interactions of any given members enforce the mutual recognition of those members in the network (Lin, 2001). Coleman (1990) stresses trust, norms, sanctions, authority and closure as forms of collective Social Capital, while also emphasizing the individual’s use of socio-structural resources in gaining better results (Lin, 2001).

Debated issues around Social Capital include relating the aggregation of collective values of economic, political, cultural or social connections/relations, with other collective terms such as trust and norms. Literature includes a display of substitutable terms or measurements that all convey solidarity and social integration with no specificity of each term's place in theory. Lin (1999) argues that Social Capital must be distinguished from collective assets such as culture, norms and trust. It is a relational measure with which other collective assets (such as trust) causally correlate without being defined by one another.

According to Coleman (1990), A fundamental social network consists of two types of elements: 1) The Actors, and 2) The things over which they have control and in which they have interest. The latter can be classified into resources or events according to their characteristics. The relations between actors and resources/events can either be control or interest as earlier mentioned. These relations can be broken down into the dimensions of Social Capital; trust, networks and norms.

2.3 Social Capital Dimensions

Social Capital has been studied as a domain and its dimensions have evolved through various researchers' additions over time to include more dimensions and concepts. Building on the works of Putnam (1995, 2002), Coleman (1988), Lin (2001) and Hunt (*Hunt et al., 2015*), a comprehensive assortment of Social Capital factors of measurements have been identified, namely; Social Cohesion, Networks and Norms as the main divisions. Social cohesion includes measures of social solidarity, trust and reciprocity. Networks includes Embedded Resources and Network Locations. Lastly, Norms comprise belief in activities collegiality and agreeing with collective rules. The following diagram illustrates the measurements adopted in the study for evaluating the volume of Social Capital.

Within sociological literature, trust has been identified in one of three ways: as a property of an individual, as a property of social relationships or as a property of the social system based on individual actions of actors (Misztal, 1996). This research focuses on the third perspective which understands trust as a valued public good, sustained by the actions of actors in the society. Putnam's work explains that trust is a fundamental factor for achieving democracy (Putnam et al., 1993) as being part of the Social Capital which is essential for "effective, responsive and representative institutions" (Misztal, 1996; Putnam et al., 1993).

Among the three Social Capital dimensions, networks are the most measurable and tangibly quantitative elements. According to Burt (2000), focusing on network mechanisms that affect Social Capital offers a more transdisciplinary perspective across theory with empirical evidence rather than loosely tied metaphors and indicators used in a number of Social Capital research. The empirical work of Burt (1992, 2000, 2001) and Coleman (1990) investigating Structural Holes Theory versus network closure as Social Capital provides a tangible quantitative base for measuring Social Capital. Burt argues that the two network mechanisms work differently and can bring various additions to the magnitude of Social Capital if utilised collectively within a "more general model of Social Capital" (Burt, 2000).

The concept of a "norm" works quite differently from the other two dimensions. A norm is "a property of the social system, no of an actor within it" (Coleman, 1990). Norms arise from collective individual actions and is usually used within sociological research to investigate and explain individual behaviour. One of the vital questions regarding norms was posed by the work of Durkheim about whether an individual's behaviour is affected by the social system in which they are (Coleman, 1990).

Examining the three dimensions of Social Capital collectively opens up a variety of lines for exploring the nature of Social Capital as a system as well as on the level of individual actions. In the case of the industry-based urban setting of this research, this investigation would be paired with an analysis of the physical space and the spatial factors that assist or hinder Social Capital concentration in the city.

3. DAMIETTA CITY AND ITS FURNITURE INDUSTRY

The Egyptian furniture industry is a well and long-established domain that is linked to geographical advantage with notable access to major markets, reasonably low costs, and highly experienced labour with regard to woodworking skills. The wooden furniture industry in Egypt dates back centuries with mostly distinct styles that incorporate Islamic, British and French elements into the design, as well as part of the sector also producing rather international style designs, specifically located in Damietta as the northern gate of Egypt (*AlShayal, 2000*). Exports in the furniture sector started in the 1960s and 1970s pursuing the Soviet Union and Eastern Europe. By the 1980s, the export

market shifted in Egypt towards Arab countries to respond to the increasing demand for furniture resulting from booming urban growth in the region (International Labour Organization, 2016).

The city of Damietta extends along the Nile and connects to the Mediterranean as well as east and west to the north coast of Egypt. The centre of the old city (**Error! Reference source not found.**) was selected for geospatial analysis in this paper. GIS analysis of the furniture industry distributed is investigated in this research as part of relating the Social Capital and currency element to the distribution and proximity of enterprises, which in this context are identified as mainly mixed-use and commercial building typologies, to one another (Figure 6).



Figure 2. Study area within Damietta city for spatial mapping. This shall include GIS data analysis of furniture industry.

According to the latest Egyptian Census data in 2013, the furniture industry accounts for 2.1% of total production in Egypt, amounting to 13.6 billion EGP in 2016 (International Labour Organization, 2016). Although this figure is relatively small compared to other industries' production, a more significant figure for this research is the number of establishments in the furniture industry, which is by far the highest among all industry sectors. The furniture industry is also among the highest in number of employees in the sector, representing approximately 11% of the employment in the Egyptian manufacturing sector. The highest concentration of furniture industry is in Damietta, Cairo and Sharkeya respectively (International Labour Organization, 2016).

Table 3. Number of establishments and employment by selected sectors, 2013

ISIC Division Code	ISIC Rev 4 Description	Number of Establishments	Shares of total manufacturing (%)	Total Employment	Share of total Employment (%)
10+11	Manufacture of food products and beverages	77,289	20	612,512	25
31	Manufacture of furniture	104,250	27	270,222	11
14	RMG (Manufacturing of wearing apparel)	48,715	13	254,937	11
25	Manufacture of fabricated metal products, except machinery and equipment	53,065	14	184,926	8
13	Manufacture of textiles	10,481	3	184,684	8
23	Manufacture of other non-metallic mineral products	12,587	3	158,275	7
16	Manufacture of wood and of products of wood and cork, except furniture;	38,855	10	98,766	4
24	Manufacture of basic metals	1,518	0	87,650	4
20	Manufacture of chemicals and chemical products	1,903	0	75,846	3
22	Manufacture of rubber and plastics products	3,735	1	54,825	2
	Total Manufacturing	385,578	100	2,416,460	100
	Grand Total	2,410,353		9,351,137	

Source: (International Labour Organization (ILO), 2016, from Census Data 2013)

The dominance of micro and small-sized enterprises in the furniture industry landscape in Egypt is undoubted even with discrepant figures from different data sources (International Labour Organization, 2016). The following table shows not only the dominance of micro and small enterprises, but the notable rise of their numbers between the years 2006 and 2013. Hence, micro, small and medium sized enterprises (MSMEs) in the furniture industry represent 99% of total number of enterprises, with about 95 percent being micro businesses (less than 5 employees). Although this data dating back to 2013 can hardly be used to reflect the numbers today, the ratios they reflect feature undeniable patterns that are most likely still present in 2018 with new values yet to be updated.

Table 4. Distribution of Enterprises in furniture industry as MSMEs categories

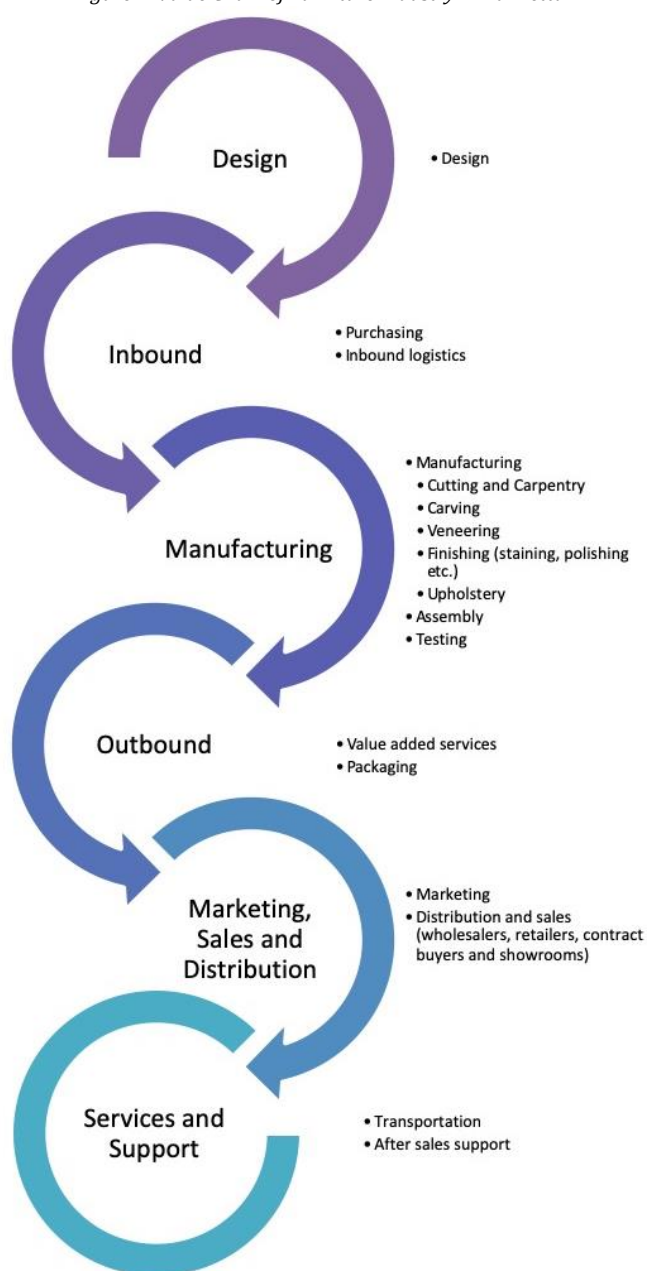
			Less than 5 employees	5-9 employees	10-24 employees	24-49 employees	50+ employees
2006	255,065	89,209	8,729	7,069	285	70	56
2013	270,222	104,250	98,728	5,006	369	56	91

Source: (International Labour Organization (ILO), 2016, from Census Data 2013)

From a socioeconomic perspective, Damietta’s economic nature has been always associated with the entrepreneurial essence of its furniture industry. It is a unique context where cluster economies (similar to Sassuola, Italy) has evolved through decades and has been passed down from one generation to the next. Such a mega project outside the city would be drawing out not only the employment pool in the city, but also the income and local investment. Instead of developing the city’s economy, the project –in its current form- is offering an autonomous industrial base where Damietta’s population shifts to be worker-based rather than owners and entrepreneurs.

According to the International Labour Organization (ILO, 2016), the value chain of the furniture industry includes design, inbound, manufacturing, outbound, marketing and aftersales services. Even though this categorisation is theoretically correct, the way it takes place within the furniture industry in Damietta is quite different and division of labour within different types and sizes of enterprises varies greatly from the theoretical underpinning shown in **Error! Reference source not found.** below. This is further explored through the analysis of this paper in the results and discussions sections, where the value chain patterns within the industry are identified and their relation to Social Capital dimensions examined.

Figure 3. Value Chain of Furniture Industry in Damietta



(Source: International Labour Organization (ILO, 2016))

4. METHODS

This paper focuses on a single case study strategy with its unique set of variables, decisions, processes and relationships investigating Social Capital as a constituent of CC within the small businesses in furniture industry in Damietta. The research proposes a cross-sectional study (Saunders, Lewis, & Thornhill, 2016) of the dynamics of the Social Capital in a Damietta city at the time of the study.

The methods used in the paper comprise semi-structured interviews with furniture enterprise owners to investigate and understand the dynamics of the industry, value chain live-work patterns and the influence of Social Capital within this context. The interviews also explore how Social Capital is manifested within the different “types” and stages along the value chain, and the reflection of the spatial distribution on this manifestation in the compact urban setting of Damietta. The paper also utilised spatial analysis of GIS data of Damietta in order to reflect the socio-economic patterns that arise on the spatial aspect of the industry distribution.

Seven semi-structured Interviews were conducted with furniture business owners of furniture industry workshops in Old and New Damietta cities. The researchers organised and conducted interviews with different enterprise owners until data saturation was achieved (Saunders, Lewis, & Thornhill, 2016). These interviews targeted two levels of enterprises, namely; large-scale factories/workshops and micro-scale workshops (**Error! Reference source not found.**). Participants were residents of New and Old Damietta, all born and raised in Damietta. As Damietta’s community and industry are considered semi-rural, the furniture industry is dominated by male owners, and as such the interviewees were all men. All interviewees were of different age groups ranging from mid-30s young owners to above 60 years old factory owners. All of whom worked within the furniture business most of their lives, whether in this specific enterprise they currently own, or in previous family-owned workshops in Damietta. Researchers also targeted a mixture of highly influential as well as small workshops owners for interviews. This was to ensure different perspectives along the market control spectrum are represented.

Table 5. Interviews division on categories and enterprise activities

Interviewees Categories	Enterprise	Number of interviews	Type (Activity) of Enterprises
Large-scale factories/workshops		3	<ul style="list-style-type: none"> - All processes inhouse enterprise. - Supplementary services enterprise.
Micro-scale workshops		4	<ul style="list-style-type: none"> - Cutting and carpentry workshop. - Upholstery workshop. - Assembly workshop.

The interview questions primarily targeted issues on trust, network density and norms (as the main measured variables from Putnam’s Social Capital Theory), and the magnitude and frequency of their use within business transactions.

Interview questions were framed to tackle the dimensions of Social Capital in a relatable way to interviewees’ daily activities and patterns, intrinsically stirring up conversation on the dimensions measured. For example, questions on trust included inquiring about whether they would “feel comfortable working with a new contact who was not referred by a trusted person in the field, and why?”. Same pattern was adopted with networks and norms, with questions as direct as inquiring about “the number of contacts” the interviewee works with, alongside indirectly asking interviewees if they have “intertwined types of relations with industry contacts (long term friends or family) and whether they prefer working with such long term contacts, and why?”.

Questions were also designed to adapt to the cultural preferences of the interviewees, as well as the delicacy of the issues discussed. For example, the measure of a business’s financial success is a difficult issue to ask in order to get viable answers, where participants would not resort to misleading answers.

Interviews were transcribed and analysed using thematic and narrative analysis. The latter tool aided the manifestation of context and socio-spatial narrative into the socio-economic debate about Social Capital, hence challenging free-market-capitalism discourse (Naughton, 2013) that could be argued to be the case in Damietta within this paper's understanding of the city's industry dynamics. Narrative analysis has been used to conclude the patterns of value chain which comprise one of the main findings of this paper. The narratives however cannot be separated from the author/researcher (Boje & Rosile, 2002), which is a bias that the researchers tried to minimise during the analysis through crossing the narratives with the thematic analysis, un-biased literature based.

5. RESULTS AND DISCUSSION

The findings were a result of an overlapped analysis of the previously mentioned methods. There were three main directions adopted in the analysis of the results; 1. Understanding the value chain patterns of the industry as they manifest in Damietta, 2. Understanding the degree of strength of Social Capital within each pattern, and how frequently this is adopted within Damietta's furniture industry in an attempt to explore Social Capital as a factor of CC, and 3. Exploring the spatial dimension of Social Capital within Damietta's city centre area to check for spatial relevance of Social Capital strength vs value chain patterns.

5.1 Value Chain Industry Patterns

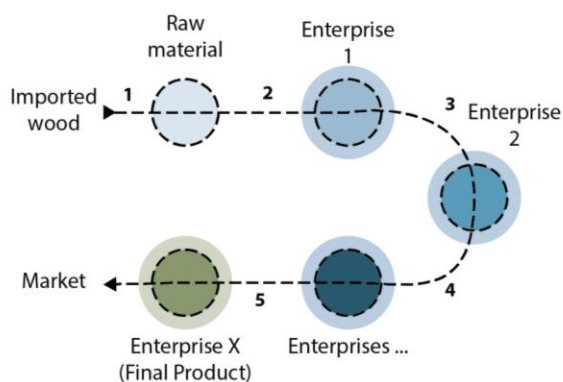
The first output from the analysis was mapping the value chain in Damietta's furniture industry, as well understanding the process through which social actions occur among actors (business owners) along the chain. There are three patterns by which the production process takes place highlighted in Figure 5 - (1)) Enterprise sequential process through which the product is transported from one workshop to the other along the value chain until being finally sold at a gallery (as in Figure 5 - (2)) Product order-based, where one central business owner orders out pieces of the final product (stages) from different trusted partners, given that the final assembly and selling would take place within the central owner's enterprise, and 3) Inhouse process (Figure 5 - (3)), which is only adopted by major enterprises in the market (top category within MSMEs classification), where the whole process takes place within the enterprise without needing partners.

All interviewees have directly or indirectly referred to one or more of the abovementioned patterns, whether it was their own adopted way of work, or their relation to other enterprises in the industry. Some of these mentions of the different types of patterns were clearly raised in statements such as:

"Within our family, there is a carpenter, an upholsterer and a wood polisher. Whenever one of us receives work, we contact each other for collaborating on it, each in his own workshop. You usually don't want all the family working on the same craft."

"I only collate the final product in my workshop now. As soon as I receive a furniture order, I have trusted people I know within each craft whom I trust for good quality parts of the furniture, like chair legs, bed headboards... etc."

"We don't need to outsource anything to other enterprises. We do everything inhouse here in our factory. However, even though I don't need to send out all my work to others, I still send some orders to my friends and contacts from time to time. We don't live alone, and it is important to share resources with others."



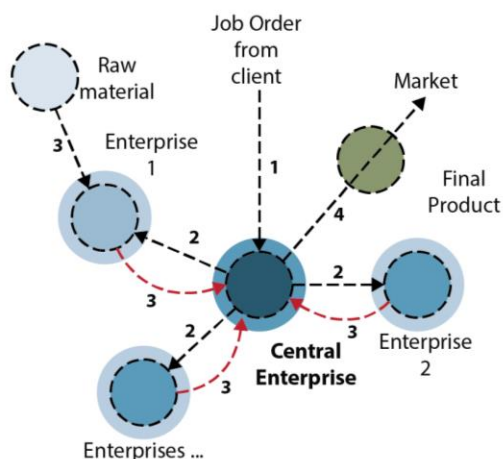
Enterprise Sequential

Product is transported from one workshop to the other along the value chain until being finally sold at a gallery.

Entails urban spatial interaction.

Used in Damietta in some cases. Exerts some Social Capital.

(1)



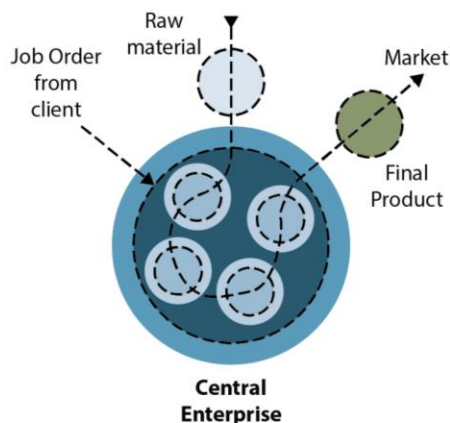
Product Order

One central business owner orders out pieces of the final product (stages) from different trusted partners, given that the final assembly and selling would take place within the central owner's enterprise.

Requires proximity and a dynamic urban spatial interaction.

Most used in Damietta. Exerts Social Capital as a currency of trust and long term relations.

(2)



Inhouse

Adopted only by major enterprises in the market (top category within MSMEs classification), where the whole process takes place within the enterprise itself without the need of any partners.

Isolated. No spatial interaction.

Used only by major enterprises. Sometimes major enterprises resort to other patterns to keep tradition of Social Capital and relations.

(3)

Figure 4. Patterns of Value chain processes in Damietta's Furniture industry (Source: Author results)

5.2 Social Capital Dimensions within Value Chain Patterns

The second layer of analysis involved exploring the overlap between the unveiled value chain typologies/patterns in Damietta and Social Capital dimensions. Here the paper asks the question of which pattern is most abundantly found in Damietta and which exhibits high magnitudes of trust, networking and norms (**Error! Reference source not found.**). This would be an indicative analysis of whether Social Capital magnitude in Damietta indeed prevails as a significant factor affecting business transactions and hence could contribute as an implicit social currency.

Within the different patterns of production studied here, enterprises exhibit/utilise Social Capital dimension as a currency on various levels. The most prevalent and long-term tradition of Social Capital exchange was always between the first type, enterprise sequential process, where concepts of reciprocity, referral and business intermediaries are highly used between enterprises. One of the interviewees owned a glue factory, which represents

an important supplementary commodity to the value chain, and discussed how his role was not only related to his own business transaction, but to facilitate between carpentry enterprises, galleries and wood suppliers. One of the emphasised ideas mentioned was how the “un-written” contract is to be honoured by all parties within the transactions, including not selling to competitors if an oral bid was placed, for example. The interpretation of time in this last example signifies the importance of trust as a currency, where no monetary exchanges occur in many cases of oral bids, which circles back to the significance of referral and the significance of a trusted word.

Within the second pattern (Figure 5 - 2) (Product order-based), Social Capital appears as assets of the “contracting party” who liaises the different orders with enterprises. In this case, the dimension of networking comes in action where a single business-owner’s network substitutes many logistic and monetary transactions with other enterprises along the value chain. Interviews reveal emphasis on having an average of 300 contacts within the city of Damietta in order to properly carry out sustainable business transactions. Within bigger-sized enterprises, these contacts are mainly business acquaintances, while in smaller entities, more family-based contacts are found.

The third typology (Figure 5 - 3) is a rather independent party in the industry, where almost all processes do not involve dealing with other enterprises. However, interviews with large scale business-owners showed that they prefer to mix up their way of work, where they sometimes switch to other processes typologies, as a personal preference, which allows them to be part of a social cohesion approach of “profit and let profit”, keeping strong bonds with their trusted neighbours and friends who work in the field.

Skill transfer within the industry in Damietta also happens in a Social Capital related pattern, where the new generations of families are encouraged to step into the business. The use of long-term relations is widely used to access opportunities for work, training and gaining more knowledge in a certain commodity, where people hire or train individuals who were/are referred by trusted contacts. This related to each enterprise trying to secure their “secret recipe” to their product, where they don’t just want to hire skilled workers, but rather “trusted” workers who could be taught later on and evolve in terms of skill.

Table 6. - Social Capital dimensions analysis in Value Chain typologies (Source: Author results)

Value chain pattern/typology	Frequency of pattern in Damietta	Social Capital Dimensions		
		Trust	Networking	Norms
1. Enterprise Sequential	Highly abundant	Medium - needed	High - needed	High
2. Product Order	Highly abundant	High - needed	High - needed	High
3. Inhouse	Few large enterprises	Selective (according to owner)	Optional - preferred	High

From examining the overlaps between value chain typologies and Social Capital dimensions within the interview data, it can be deduced that Product Order pattern exhibits the highest Social Capital magnitude, as it requires a high level of trust between the core enterprise and the supplementary ones, as well as high networking capacity in order to hire appropriate skills for the different activities, in addition to the industry norms that are abided by in all patterns within the city. Enterprise Sequential pattern also exhibits high Social Capital, with less need for trust, as enterprises deal primarily with adjacent activities to them along the value chain, with no need for trust within a wider circle.

Since the majority of enterprises in Damietta are MSMEs, they all operate within one of the two primary patterns identified above (Enterprise sequential or Product order). This intrinsically affirms the paper’s initial hypothesis on the abundance of Social Capital and its high influence in the market in Damietta, as almost 99% of furniture enterprises in Damietta (**Error! Reference source not found.**) operate within a value chain pattern that incorporates high Social Capital within business transactions.

5.3 Social Capital vs Spatial Distribution

An investigation of spatial distribution of furniture enterprises as well as the urban fabric of the city reveals an abundance of mixed-use entities with clear concentrations of enterprises in certain areas of the city centre (**Error! Reference source not found.**). It is also significant to note the small-scale land plots in the city which reflect on small areas for individual enterprises, as well as a compact street network within the city. As most land plots range between 200-400sqm (**Error! Reference source not found.**) (CAPMAS, 2019), the small scale of enterprises is almost ensured, which reflects on continuous need for the value chain patterns that thrive with higher Social Capital in the specific context of the city of Damietta. These spatial factors contribute to creating a proximal environmental where owners are in constant contact with business partners and potential collaborators, increasing the chances of taking forward product orders and business interactions. Figure 5 below shows how the enterprises utilise the street space as a common “gallery” to showcase their products with proximity that ensures daily social interaction between adjacent workshops.



Figure 5. Example of compact urban fabric with mixed-use typology of the internal streets of Damietta's city centre (source: Author, 2019)



Figure 6. Damietta city map: showing compact urban fabric with abundance of mixed-use typology (residential + furniture workshops) (Data source: CAPMAS, 2019, Map developed by Author)

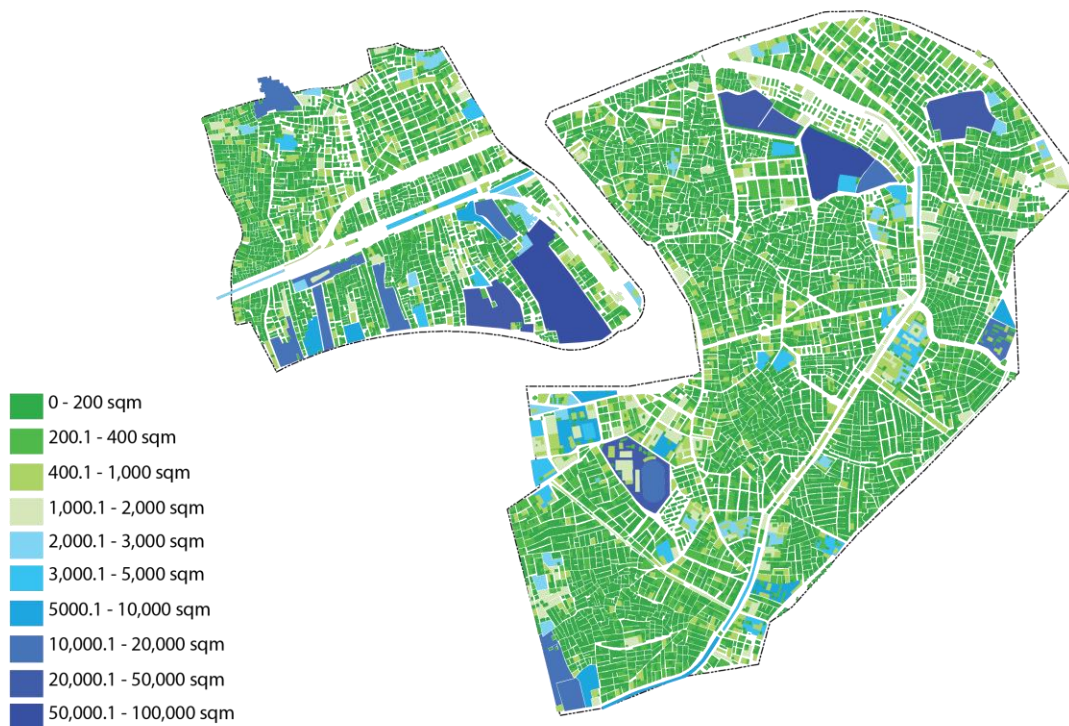


Figure 7. Map of land plot areas in Damietta (Source: CAPMAS, 2019, Map developed by Author)

6. CONCLUSIONS

The primary hypothesis of this research which claims the prevalence of Social Capital agglomeration within the economic cluster of Damietta as a driver and catalyst towards complementary currency has been supported through the data. The findings exhibit evidence of the vitality of trust, networks and norms within the value chain patterns of business interactions between enterprises in the furniture industry, specifically in the case of MSMEs. The closed social network of Damietta (*Wallman et al., 2018*) does support the increase of social bonds between business-owners in the industry, hence revealing higher efficiency of business transactions that skips some logistic guarantees based on predetermined trust and reliability.

The spatially dense urban fabric of the city also suggests a link between proximity and Social Capital, which was also investigated through spatial analysis of the city fabric. Even though this case implies clear industry-related indicators, the potential for generalisation lies in the common factors found in global south cities with local industry concentration, small-scale (MSME-based) economic cluster, and a strong long-term social structure. Through context examination and consideration, the research methodology can be replicated in different contexts for comparable industries; focusing on Global South industries within communities that exhibit strong societal norms and long-term social relations.

Suggested further research could incorporate the investigation of the bridges that link Damietta to the international market, which could also be compared to other cities such as Sassuolo or similar examples of industry-based urban contexts, in terms of internal Social Capital versus external links to the global market. Another approach could incorporate a closer focus on the nature of bonds between enterprises in Damietta, capitalising on Burt's work towards investigating the reasons behind the rise or demise of certain relations that highly affect the market. Exploring how to operationalise and numerically quantify the magnitude of Social Capital dimensions within the different value chain patterns could also provide a continuation to the work presented in this paper.

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