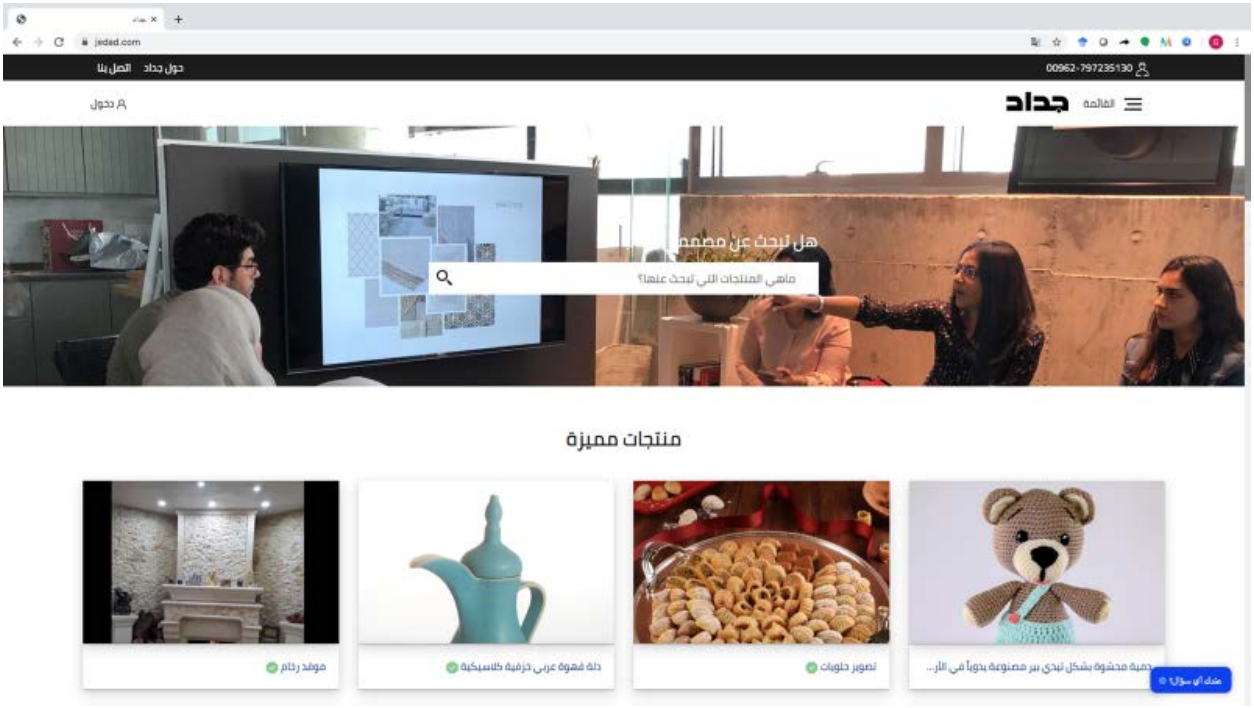
Public Disclosure Authorized

Public Disclosure Authorized



Jedad: Creating Market Opportunities for Refugee and Host Community Businesses in Jordan

Aminur Rahman, Giacomo De Giorgi, Saleem Najjar, Emad Jaghasi

Context and Motivation

Jedad is a business-to-business networking initiative that aims to boost access to market and sales opportunities for micro and small enterprises (MSEs) in Jordan. The initiative focuses on refugee and women entrepreneurs. It contributes to the holistic approach of the World Bank Group, Development partners, and the Government of Jordan to addressing the refugee crisis by shifting the paradigm from humanitarian assistance to a strategy of job creation and inclusive growth led by the private sector.

Nearly eight years into the Syrian Civil War, Jordan has accepted about 1.4 million refugees (of whom approximately 657,000 are officially registered), amounting to around 20 percent of its population.[1] Jordan has one of the highest ratios of Syrian refugees among Syrian's neighbors, and historically, it is the third largest recipient of refugees in the world. Superimposed on Jordan's limited resources and high unemployment rate (nearly 19.1 percent in 2019, with youth unemployment rate approximately twice the total unemployment rate),[2] the refugee influx has created a major economic shock. The refugee crisis is likely to persist for a long period of time. According to UN estimates, it takes on average 17 years before refugees in protracted crises return home.

Against this backdrop, this entrepreneurship pilot aims to promote entrepreneurship, business growth, and job creation opportunities for Jordanians and Syrians so that refugees, rather than being a burden to the host economy, can productively contribute to it, particularly because, as noted, the refugee crisis is unlikely to be a short-term phenomenon. The central goal of this entrepreneurship pilot is to promote business-to-business networking as a means of creating markets for Syrian and Jordanian businesses.

Business networks are essential for entrepreneurial success.[3] Networks of suppliers and clients, as well as networks of managerial connections, provide access to a range of services: information, training, referrals, intermediate inputs, and trade credit, among others. These networks are particularly important in environments characterized by missing information, lack of trust, or fragility, because peers can provide knowledge and regular

1. http://data.unhcr.org/syrianrefugees/regional.php; accessed on June 15, 2020.
2. https://data.worldbank.org/indicator/SL.UEM.1524.ZS?locations=JO; accessed on June 15, 2020.
3. A number of studies, indeed, demonstrate the importance of networks in developing countries. Some studies (e.g., Jackson et al. 2012; Karlan et al. 2009) show that networks and repeated interactions facilitate trust-based transactions in developing countries. Feigenberg et al. (2013) show that repeated meetings generate greater risk pooling, i.e., greater trust. More recent evidence on firm networks shows that regular meetings between firm managers increase lending within the group (Schoenherr and Vig, forthcoming). In China, Szeidl and Jing (2016) find that regular networking meetings result in higher trust between business managers. The business networks can also help improve outcomes, including access to credit (McMillan and Woodruff 1999; Haselmann Schoenherr, and Vig 2016) and access to business partners (Bernard, Moxnes, and Saito 2015).

interactions that help build business trust. For Syrian entrepreneurs in Jordan experiencing these environmental circumstances, creating business networks could enhance their chances of entrepreneurial success.

Many Syrians who were entrepreneurs in Syria have now, as refugees in Jordan, lost their businesses and their supplier and customer networks. New Syrian entrepreneurs in Jordan also lack local networks. In addition, Syrian entrepreneurs likely do not have knowledge about how to run a firm in Jordan. Overall, refugees' connections with the Jordanian local economy are weak and would benefit from networking opportunities.[4] At the same time, for Jordanian entrepreneurs and potential entrepreneurs, the presence of refugees provides an opportunity to tap into Syrian business skills and ideas. Hence entrepreneurs of both countries would benefit from networking in similar sectors (horizontally) and in upstream or downstream sectors (vertically). By exploiting the skill and knowledge complementarities between the different businesses, networking could improve the chances of success for all. Following are examples of possible successes:

> *Example 1.* A Syrian entrepreneur is looking for a Jordanian distributor for his handmade pottery. A Jordanian online seller of arts and crafts is looking for products to sell. The match takes place, and "Syrian made" pottery is sold through the Jordanian online platform. Both entrepreneurs are better off.
>
> *Example 2.* A Syrian entrepreneur has opened a retail shop but lacks suppliers. The Syrian entrepreneur reaches out to her Jordanian network, and network members introduce the Syrian entrepreneur to possible suppliers.

Previous research has predominantly focused on different supply-side constraints for business growth, such as training, capacity development, and access to finance (for a review, see McKenzie and Woodruff 2014). However, the existence of frictions on the demand-side is also critical and can lead to factor misallocation and affect productivity growth. In this context, this project's intervention to facilitate business networks is a relatively unexplored area, particularly as regards creating networks of suppliers/clients through an online platform.

---

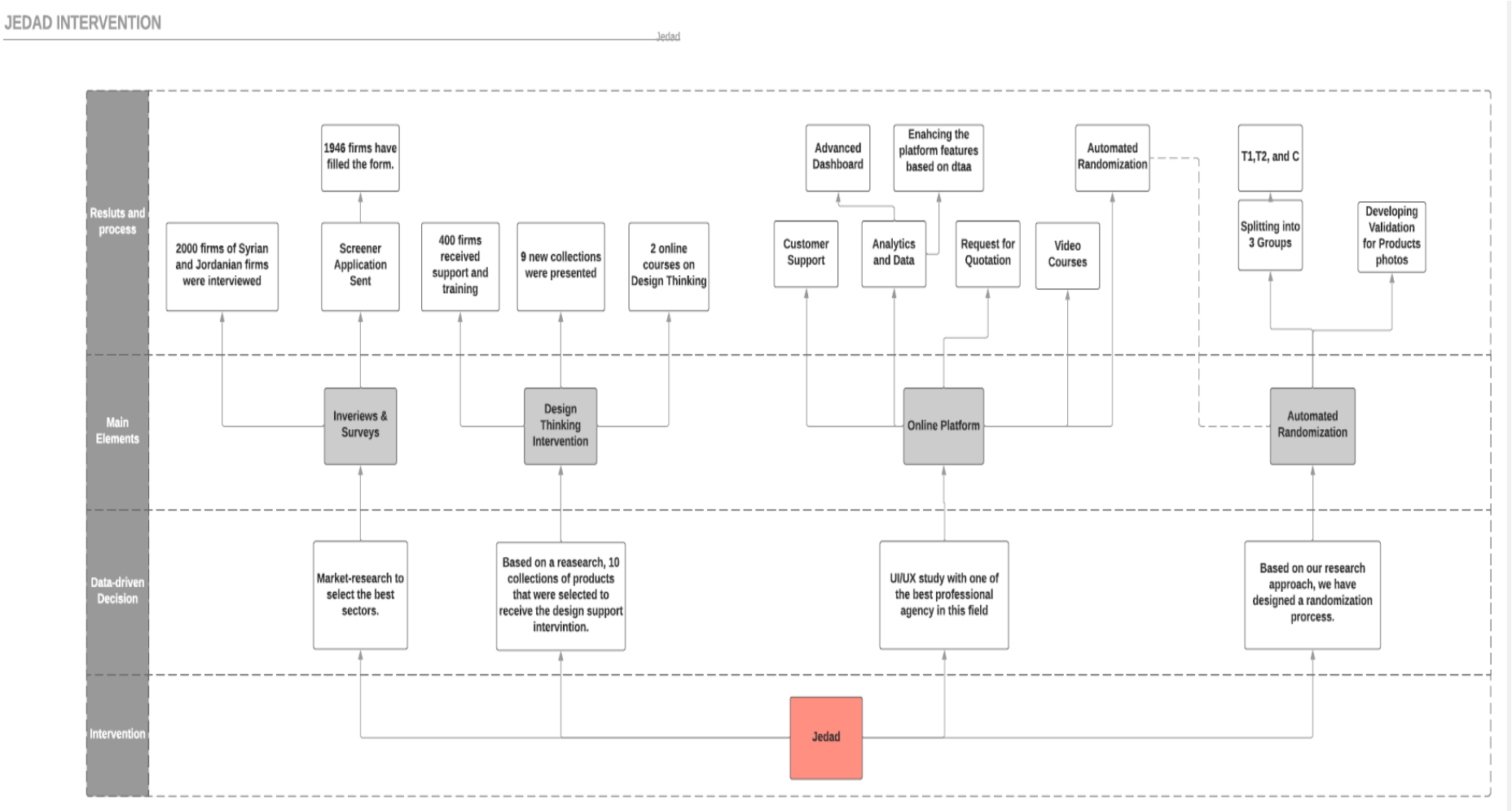
4. Anecdotal evidence suggests that it is nearly impossible for a Syrian to register and operate a business without a Jordanian partner. Currently, such partnerships happen somewhat arbitrarily when a Syrian entrepreneur, after failing to get clearance from the Ministry of Interior to register his/her business, attempts to find a Jordanian national as a business partner to register the business under the Jordanian partner's name. This creates an expropriation risk if the business turns out to be very lucrative, as the Jordanian partner can expropriate the business from the Syrian partner by threatening the latter with deportation. Nonetheless, many Syrians do operate their businesses in Jordan using this set-up, as the expected gain from running a business in this way is still better than their other options.

In a fragile context such as exists in Jordan, an online business-to-business networking platform can potentially reduce the search and matching costs between suppliers and clients and build trust through client feedback. The online platform can allow Syrian entrepreneurs to reach a larger base of customers and suppliers and better tailor their products and services to the demands of the Jordanian market (as well as international markets). Given the small size of the Jordanian domestic market vis-à-vis the large presence of Syrian refugees, such a platform, once developed, could also potentially be expanded (with little additional cost) to include foreign clients/suppliers.

The Intervention Details

The overall intervention in Jordan progressed between 2017 and 2019 using a phased approach. The stages were as follows: (i) a "proof of concept" pilot phase tested the usefulness of the business networking hypothesis as a means to promote business growth; (ii) a detailed baseline survey of Jordanian and Syrian businesses was conducted to understand their business characteristics and obstacles to growth and to determine if and how business networking and related interventions could support these businesses; (iii) an online business-to-business (B2B) platform — Jedad.com — was developed; and (iv) a sample of businesses was supported in product design improvements to cater to market demand. The intervention details are summarized in Figure 1.

Figure 1: Jedad Intervention Detail Flowchart



I. Proof of Concept Pilot Phase

To design the intervention, the World Bank team conducted detailed stakeholder consultations with a range of individual business owners (of both genders and of both Jordanian and Syrian nationality), development partners, representatives from the Government of Jordan, and with OASIS-500, WAMDA, Jordan Chamber of Commerce, Zain, and Luminous.[5] Inputs from these consultations were used to design the baseline survey design and networking interventions.

A pilot networking intervention phase was then administered to approximately 100 businesses (60 of which were Jordanian and 40 of which were Syrian entrepreneurs) over several months in 2017 to test if the businesses found networking to be an important element in their business development and growth. This phase was launched with an Entrepreneurship Workshop and Networking Event on May 6, 2017, to which all 100 businesses were invited; more than 90 businesses were physically represented at the event. The entrepreneurship event featured four inspiring private sector leaders as speakers: the president of the Young Entrepreneurship Association and a successful female entrepreneur; the chief executive officer of OASIS-500; the chief operations officer of Zain Telecom; and a well-known mentor in Jordan from the Queen Rania Entrepreneurship Institute. The speakers highlighted the importance of networking and mentorship for their personal and professional growth.

Following the Entrepreneurship and Networking Workshop, the project team randomly selected 50 businesses and assigned them to five groups of ten businesses each. These treatment groups were then invited to a series of networking sessions during the summer and fall of 2017. In these networking sessions, each of the business groups discussed among its members business ideas, forming partnerships and structured collaborations, customer and supplier bases, hiring employees, and other factors affecting their business growth. The World Bank team administered a brief questionnaire to each of

5. OASIS-500 is the leading seed investment company and business accelerator in the Tech and Creative Industry spaces in the Middle East and North Africa (MENA) region; as a VC, it has operated in the area for more than a decade. WAMDA is a platform of integrated programs that aims to accelerate entrepreneurship ecosystems throughout the MENA region. WAMDA Capital is a leading regional venture capital firm focusing on deploying growth capital in the Middle East and North Africa's leading entrepreneur-led technology companies. Zain is a leading mobile telecommunications provider in the Middle East and North Africa. Recently, Zain launched the ZAIN Innovation Campus, which aims to activate and ignite the start-up and entrepreneurship ecosystem in Jordan and MENA. Luminous Group is a private holding company that has investments ranging across diverse sectors, including education, trading, real estate, and hospitality, throughout the MENA region. Recently, Luminous is managing Shamal Start, an initiative to fund and support Jordanian and Syrian entrepreneurs and MSMEs in Jordan.

the treatment groups at the end of the networking sessions. The key findings from this brief survey are summarized as follows:

a. The overwhelming majority (above 90 percent) found the networking meetings useful or very useful.

b. All participants took the others' contact information to follow up outside the scheduled meetings.

c. Key topics of interest discussed during the networking meetings included partnerships, marketing, exports, online presence, and start-ups' challenges and ways to overcome them.

While the businesses found the networking meetings very useful, the logistics and transaction costs of arranging these meetings appeared to be high. In addition to the costs of running the meetings, for a majority of women entrepreneurs, particularly Syrian women entrepreneurs located outside of Amman, such as in Irbid and Mafraq, attending the meetings physically (after the end of their business day) appeared to be costly (due to transportation costs, child-care needs, mobility issues, and so on). A number of business owners also found it challenging to physically attend the meetings in the specified time slots due to their travel and other obligations. Considering all these issues, the project team subsequently moved to an online B2B platform, as discussed in Section III below.

II. Baseline Survey

The project implemented a detailed baseline survey of approximately 2,100 hundred businesses in Jordan to get comprehensive business profiles and to determine how those businesses could be helped through networking and related interventions. To construct the sample frame for the survey, a detailed listing of micro and small businesses in Jordan was also conducted, with a specific goal of listing Syrian refugee entrepreneurs, who are not easily identifiable in conventional administrative databases. Central to the intervention, a key screening criterion for sample selection was whether the firm would be interested in participating in an online B2B platform. The survey was carried out in batches in 2018 and 2019. Upon completion of each batch, the surveyed firms were randomly assigned to different treatment and control groups, as illustrated in Figure 1. The interventions (i.e., treatments) were inclusion on the online B2B platform, with a subset of the firms also receiving product design support. This methodology enabled rigorous measurement of the

interventions' future effects (should additional resources become available to conduct follow-up surveys and undertake an impact evaluation).

The firm survey captures information about business owners' characteristics as well as key business performance indicators, such as employment, sales, costs, access to market, supplier and customer base, and so on. Some key features of the sample businesses are discussed below, while the Appendix provides descriptive graphs and tables of the baseline survey data.

Business Owners' Characteristics: Nationality, Gender, and Education

Consistent with our project design approach, the overall sample was roughly equally split between Syrian and Jordanian entrepreneurs as well as between male and female owners (see Figure A1). Forty-nine percent of the sample firms were run by Jordanian owners, while 51 percent were run by Syrian owners. Fifty-five percent of the business owners in the sample are male and 45 percent are female. However, when we further disaggregate gender of the ownership between Syrian and Jordanian businesses, we see the predominance of women entrepreneurs in the Syrian refugee business population. This is consistent with the predominance of home-based, informal economic activities within the Syrian refugee population in Jordan. In our sample, one-third of Jordanian businesses, vis-à-vis two-thirds of Syrian entrepreneurs, were female. The level of business owners' education is much higher for Jordanians than for Syrians. More than one-third of Jordanian male and female business owners have completed high-school, vis-à-vis less than one-fifth of Syrian male and female business owners. Our project focuses on refugees outside of the refugee camp, which is the largest share of the Syrian refugees in the host economy.

Firm Size, Revenues, and Costs

More than 90 percent of our sample businesses (across owner nationality and gender) had active sales at the time of the survey. The average annual revenue was much higher for Jordanian firms than for Syrians, particularly because most of the Syrian businesses tended to be informal micro and small businesses. The average revenue in 2017 for Jordanian male entrepreneurs was JD 117,000 compared to JD 14,000 for Syrian male entrepreneurs. There is also a stark difference in annual revenue between Jordanian male and female entrepreneurs. The average annual revenue for Jordanian female entrepreneurs in 2017 was only JD 8,000, while that for Syrian female entrepreneurs was JD 1,400.

The distribution of annual costs in terms of material, labor, utility, and rent also show that, overall, Jordanian male-owned businesses are by far the largest in size. This was true as well in terms of firm size based on employment. Their average number of full-time

employees is five, while some firms have as many as 200 employees. Syrian male-owned firms have on average four full-time employees, while some firms also have more than 200 employees. On average, Jordanian female-owned businesses have one owner and one full-time employee, while Syrian female-owned businesses are primarily owner-only businesses. Table A1 provides details of the distribution of costs and revenue, while Table A3 provides employment distribution.

To better capture the welfare of the businesses in our sample we also collected data on monthly household consumption for food, nondurables, durables, and rent or rent equivalent. In line with the distribution of business revenues, we see household consumption levels are much higher for Jordanian businesses than for Syrian businesses (Table A2). The average per capita household consumption of Jordanian male-owned businesses was approximately JD 560. This value is more than twice the average per capita household consumption for Syrian male-owned businesses.

Profitability and Innovation

Profitability seems to be highest for Jordanian male-run firms, while the incidence of innovation seems to be higher for Syrian businesses. This contrast is particularly interesting from the perspective of the need for networking, as networking could potentially increase the "marketability of these innovations" for Syrian refugee businesses. On the other hand, more established networks of suppliers and customers could be a key driver for higher profitability among Jordanian businesses. The average annual profit for Jordanian male-owned businesses is JD 16,505, while for Syrian male-owned businesses it is JD 2,405. The average profit for female-run businesses is much lower: JD 1,402 for Jordanian and JD 200 for Syrian female entrepreneurs. However, a significant amount of heterogeneity of profitability occurs across firms, as summarized in Table A3. Syrian businesses are more likely to have new products than are their Jordanian counterparts, an indication the Syrians are trying to adjust to a new country context. Thirty percent of Syrian male- and female-owned businesses in our sample innovated a new product, while the corresponding share is 18 percent for Jordanian male-owned businesses and 13 percent for Jordanian female-owned businesses (see Table 2 for further details).

Clients/Suppliers Networks

From the perspective of our intervention design, this is the central theme in the survey. As mentioned, the overarching objective of the project is to increase market access and generate an expanded network of suppliers and clients to foster enterprise growth. To understand the relevance of our intervention, the survey thus investigated if firms in the sample were interested in expanding their networks and in potentially having a larger

presence in exports and online markets. While Jordanian businesses are more likely to have established networks of suppliers and clients, the challenge for Syrian entrepreneurs is to establish their market presence in the host community and upgrade product quality. (Consequently, as we discussed above, the rate of innovation indeed seemed higher for Syrian businesses.)

As expected, our survey data shows that on average Jordanian male-owned businesses have more than seven suppliers and 1,160 Clients. On other hand, Syrian male-owned businesses on average have fewer than three suppliers, and 40 percent of the number of clients that Jordanian male-owned businesses have (see Table A4). Moreover, while Jordanian male-owned businesses have long-established relationships with their suppliers, dating from at least since 2011, because of the very nature of the refugee crisis most Syrian businesses only established this relationship beginning in late 2016. These findings in turn depict the importance of business networking to expand the supplier and customer base, particularly for Syrian refugee businesses.

Not only do Syrian businesses have fewer suppliers than Jordanian businesses, the quality of the supplier networks available to Syrians is much worse than that available to Jordanians. While the suppliers are usually or always on time for 90 percent of Jordanian businesses, that is the case for only 70 percent of Syrian businesses (Figure A2). Similarly, fewer Syrian than Jordanian businesses report receiving good-quality supplies from their suppliers (Figure A3). A smaller share of Syrian businesses (77 percent male-owned and 68 percent female-owned businesses) than Jordanian businesses (87 percent male-owned and 79 percent female-owned) feel they are charged a fair price by their suppliers (Figure A4). Finally, suppliers' more often give credit to Jordanians than to Syrians. Thirty-six percent of male-owned and 56 percent of female-owned Syrian businesses have never received a supplier's credit, while the corresponding share for Jordanian male- and female-owned businesses are 25 percent and 37 percent, respectively.

A larger share of Syrian businesses vis-à-vis Jordanians perceive that their clients rarely pay a fair price for their goods and services. For example, 58 percent of Syrian male-owned businesses compared with 80 percent of Jordanian male-owned businesses consider that they are paid a fair price usually or always.

To overcome the problem of poor supplier and customer networks, most Syrian businesses expressed the need to receive information related to cost cutting. On the other hand, Syrian businesses hardly use any means other than "word of mouth" to access information about suppliers or product prices. This in turn reflects the potential opportunity

of low-cost online tools or platforms to overcome information barriers, particularly for Syrian refugees' businesses in Jordan.

III. Online Business-to Business Platform

To address information frictions and limited networks of suppliers and clients, particularly for Syrian refugees' businesses, and to leverage learning from the pilot phase, the entrepreneurship initiative created an online platform containing about 1,500 businesses. The online platform — Jedad.com —enables businesses and entrepreneurs to connect with potential clients (both suppliers and business customers) by reducing search costs. The search costs for markets and suppliers are often very high for micro and small firms. This is particularly the case for refugees, the displaced, and women entrepreneurs, due to their limited mobility.

As mentioned above, due to the lack of knowledge and limited mobility, Syrian refugee entrepreneurs are likely to have a difficult time reaching high-demand markets and better-quality suppliers. (This is evident in the baseline survey results discussed above.) This, in turn, is likely to affect Jordanian customers' (households or businesses) access to Syrian products and services. An online platform can reduce the search and matching costs between suppliers and clients and also build trust through indirect certification and customer feedback (e.g., rating) systems. Online platforms can potentially allow Syrian entrepreneurs to reach a larger customer base and to better tailor their products and services to consumer demand at a low cost (free, in our case). The usefulness of online platforms to reduce information frictions in markets is evident in a number of platforms, such as Taskrabbit, Angie's List, or Homeadvisors in the United States. Similarly, in a number of countries in the Middle East and North Africa (MENA) region, Uber and Careem overcome such information frictions by connecting drivers with customers.

This initiative to improve supplier and client matching also contributes to the existing knowledge gap on the firm growth agenda. The effects of improved supplier-client matching on firm performance are not well understood. Despite recent theoretical interest,[6] evidence on the direct effect of supplier-client matching is limited. We are not aware of any work that

6. Theories of supply chains include Acemoglu et al. (2012), Antras and Chor (2013), Oberfield (2013), and Eaton, Kortum, and Kramarz (2015), who model their aggregate and efficiency implications.

experimentally evaluates the effect of improved supplier-client matching or any work that measures the benefits of online platforms for firm performance.[7]

The online platform can potentially promote international trade, particularly for small businesses, as the experiences of Amazon, Alibaba, and eBay demonstrate. Arguably, the small size of the Jordanian local market hinders firm growth and is not amenable to absorbing potential large influxes of Syrian small manufacturers, artisans, and service providers. During our pilot phase, we heard from many of our networking group participants about their frustrations over the lack of sales in the local market. Similarly, we interviewed several Syrian refugee business owners who highlighted that skilled Syrian refugees in crafts, trade, and other occupations are not making adequate sales on a monthly basis, as they had lost their access to the Gulf Cooperation Council (GCC) market since fleeing Syria. On the other hand, a recent study by PwC done for UNICEF highlights that the potential export market for products from Jordan is US$32 billion. An online platform such as Jedad can be easily scaled up to incorporate suppliers and clients from other countries to address this untapped export potential as well as to facilitate imports from competent international suppliers of better-quality or cheaper-priced raw materials and inputs. Indeed, as discussed in the results section, through our initiative we did manage to generate potential demand for Syrian refugees' products in the GCC market.

At least three sets of barriers, however, prevent Syrian refugee businesses (and to a great extent Jordanian MSEs) from readily tapping the market through established online platforms, such as Amazon Handmade and Etsy, which the Jedad initiative attempted to address. These barriers include financial transactions, shipping and logistics, and Arabic customer support.

To receive payment, online platforms like Etsy require that sellers have a credit card or a PayPal account. Most of our beneficiary businesses in Jordan do not have bank accounts, however, which is consistent with the overall low level of financial inclusion across MENA countries. Through the Jedad initiative, our team partnered with local service providers to facilitate payments. We helped our participants set up e-Wallet in Jordan (Zain Cash), which allows Syrian businesses to receive a MasterCard to conduct financial transactions using the online platforms.

7. Some studies use observational data to measure the effect of improved transportation on supplier-client matches (Bernard, Moxnes, and Saito (2015)) and that of access to import or export markets on firm performance (Amiti and Konings (2007), Halpern, Koren, and Szeidl (2015), Chaney (2014), Atkin, Khandelwal, and Osman (2015)). Also related is work showing that shocks diffuse along supply chains (Carvalho at al. (2014), Allcott, Collard-Wexler, and O'Connell (2015), Barrot and Sauvagnat (2015)).

Business registration is a necessary precondition to getting a business discount on shipping rates from prominent couriers such as DHL and Aramex. Only registered businesses are eligible to get shipping discounts from the shipping couriers, which require signed contracts. As already mentioned, most of our sample Syrian refugee businesses are informal and are thus unable to get shipping discounts. Through the Jedad initiative, we enabled some of these businesses to export their products at a discounted shipping rate (see Figure 2 as an example) through local registered businesses: a case in point of the value of business-to-business networking to overcome market failures and frictions.

Given the owners' low levels of education, particularly for Syrian refugees and female business owners, as described in the baseline data, the language barrier is a key obstacle to their effective participation in international established marketplaces, such as Etsy and Amazon, as most international marketplaces do not offer platform support services in Arabic. On the other hand, many clients from the Arabic world, such as those from the GCC countries, would be much more comfortable interacting through a business's platform dashboard. Creating the Jedad platform in Arabic overcame this issue for our beneficiary businesses (see Figure 3).

Figure 2: Jedad facilitated Syrian Jasmine Workshop's international B2B order for 50 kilograms of handmade Syrian soap.

Figure 3: Business Dashboard on the Jedad Platform

Additionally, our online platform supports the beneficiary groups in several ways currently absent from many established international platforms. These include the following:

- *One platform for both manufacturers and service providers:* While most online marketplaces support either manufacturers or service providers, Jedad targets both categories, bringing them together in one place (service providers also need manufacturing products and vice versa). The user experience tests conducted for the Jedad platform suggest that it offers a good user experience for both manufacturers and service providers.

- *Focus on B2B orders:* While many small businesses use Facebook and Instagram, these tools are predominantly designed for business-to-customer (B2C) transactions. Similarly, most online marketplaces, such as Amazon or Souq, focus on connecting businesses to individual customers. The Jedad platform, on the other hand, addresses the gap in promoting B2B interactions. B2B orders help firms to sustain their business with more revenue and less cost. The Jedad platform offers the feature "online request for quotation," only recently introduced on the Alibaba platform, which allows businesses to send price offer requests to all businesses in the network at once. This significantly improves price competitiveness, both for final products and for inputs, and thus addresses the problems that limited networks of suppliers and clients create for many of our beneficiary businesses regarding information friction related to market prices of the products they produce or the price and quality of the inputs and raw materials they use (as evident in the baseline survey).

Table 1 provides a comparative perspective on Jedad's features vis-à-vis other prominent platforms.

Table 1: Comparative Features of Jedad Initiative vis-à-vis Existing Established Platforms

	Jedad	Etsy/Amazon	Facebook/Instagram
Facilitating payments	✓	✗	✗
Affordable shipping rates	✓	✗	✗
Running paid marketing campaign for businesses	✓	✓	✗
Facilitating partnership between businesses	✓	✗	✗
Supporting Arabic language	✓	✗	✓
Online request for quotation from the entire network	✓	✗	✗
Expert's recommendation on design improvements to enhance the marketability of products and services	✓	✗	✗

IV. Design Thinking and Mentorship Intervention

In addition to the online networking platform, an innovative critical intervention of this project is providing design thinking support to improve the market appeal and marketability of the products of beneficiary MSEs. While running marketing campaigns for our beneficiary firms to generate their first online sales and to make them familiar with the process, we noticed that the customer acquisition cost is very high for our firms' products. Their products are not able to compete online with other international competitors. A lack of understanding of the online customer and market makes it difficult for our participating

firms to produce competitive designs. We thus introduced an additional intervention aimed at improving product design.

As a part of our product design improvement intervention, we conducted rapid market research to identify a competent design thinking firm that could help the beneficiary businesses design better products with a better market fit. Following this process, a competent product design expert was chosen.

We provided design thinking support in three different forms to approximately 400 MSEs:

- 200 firms received design thinking capacity-building workshops (Figure 4).
- 50 firms received one-on-one mentorship sessions with the designer and her team to help them develop better products (Figure 5).
- 150 firms received product design reports and recommendations and videos developed by the designer and her team (Figure 6).

Figure 4: Design Thinking Training Workshops

Over 200 firms have received training on design thinking to enhance their products and services.

Figure 5: One-on-One Design Thinking Mentoring Sessions

Over 50 Syrian and Jordanian artisans have participated in one-on-one mentorship sessions with experts to discuss how they can enhance their products' design, packaging, etc.

Figure 6: Design Guide for Wood Product Manufacturers

تصاميم الأحجار:

نعتقد أن صناعة منتج كامل أي الطاولة مع الأحجار فكرة جيدة بحيث أنها تتناسق وتتناسب مع بعضها ويدل على أن الحرفي يهتم بجميع تفاصيل المنتج وأنه يعطي كل منتج حقه.

قمنا بتجهيز تصاميم بسيطة تتناسق مع التصاميم التي عرضت في البداية.

We implemented two extensive design thinking capacity-building workshops. These workshops aimed to provide knowledge on key essential features of design thinking. The workshops included the following topics: (i) the concept of design, (ii) know your customers, (iii) what does it require to be creative, (iv) problem solving in a traditional way vis-à-vis through design thinking, (v) examples of leading companies, such as Airbnb and Apple, that routinely use the design-thinking approach, (vi) examples from local and regional companies, such as Careem, that use design to provide a great product or service, (vii) the importance of prototyping, and (viii) testing and optimization.

In the second, advanced form of design intervention, 50 firms received a series of one-on-one mentorship sessions with our design and marketing expert company. During these workshops, artisans and manufacturers received direct feedback on enhancing their products and developing new products with improved market appeal. In subsequent sessions, participants were required to bring enhanced designs of their products (see Section V below for examples) based on the feedback they received previously from the design experts. In addition to product improvement designs, one-on-one mentorship was also provided on a range of other issues, such as how artisans can build a personal brand, how to improve packaging, and how to reach out to better-quality suppliers.

The design improvement outcomes from the product design sessions are illustrated in the following three examples.

Case Study 1

This is a case study where we helped local crafts makers to do products that are exportable by applying the following factors:

- Removing materials which can be harmful for kids (Like plastic eyes).
- Providing a guide on color, which allowed them to make enhanced products using trendy colors

Case Study 2

We helped the makers of this craft item to enhance the use of color; to transition to eco-friendly, plastic-free materials; and to upgrade to more exportable quality.

Case Study 3

Aleppo soap is a popular product made by Syrian women in Jordan. However, the product needed improvement in quality, design, and packaging for online sales and shipping. We helped these refugees manufacturers to

- Improve the product design, quality, and packaging.
- Access new markets through Jedad platform.

During the one-on-one sessions, the team also produced guides and video lectures created by the designers. These contain information related to redesigning better products and conducting marketing campaigns. Guides were developed for the following product categories or topics:

i. Prayer rugs
ii. Jar food
iii. Women's accessories
iv. Stuffed crochet toys
v. Traditional handmade bags
vi. Scented candles
vii. Backgammon and other game boards
viii. Jewelry boxes
ix. Color and branding guidelines

The guides and videos were then shared with 150 businesses that had not participated in the physical one-on-one mentoring sessions.

V. Results

In the last few months of the project, when the team was about to ramp up online networking, eCommerce marketing, and product design support based on the successes of the previous phases, the project came to an abrupt stop due to COVID-19 disruptions. Nonetheless, by February 2020, the project had achieved a number of significant milestones and results, as highlighted below:

1. Launched an enhanced online B2B networking platform to promote Jordanian and Syrian refugee entrepreneurship: Jedad.com
2. Hosted approximately 1,500 businesses on the platform
3. Significantly enhanced product designs of the beneficiary producers
4. Generated actual sales of US$20,000 of the improved products by the project's beneficiaries (see Table 2)
5. Generated potential demand of US$200,000 for the improved products from the GCC market (uncompleted due to COVID-19 disruptions)

Table 2: Key Results

Indicators	Toys	Prayer Rugs	Candles	Leather Products	Pottery Makers	Wood Products (traditional Syrian items)	Photo Session Services	Total
Number of producers trained	33	7	8	2	2	15	3	70
Number of producers sold	9	4	3	1	1	11	1	30
Value of direct sales (in Jordanian dinars)	4,000	1,200	300	100	400	6,000	3,000	15,000
Value of B2B price offer sent through the platform (in Jordanian dinars)	20,000	100,000	1,000	21,000	20,000	40,000	15,000	217,000
Number of eCommerce platforms where the product is sold	3	3	3	3	3	2	1	18
Number of eCommerce platforms where the product is listed	3	3	3	3	3	1	1	17
Number of customers clicking the product	1,442	1,303	115	19	16	3,200	119	6,214

VI. Concluding Remarks

Possibly more than 300,000 Syrian refugees in Jordan possess highly developed craft skills and could provide services to Jordan's market and through export markets. However, this potential remains untapped due to a lack of market access. A similar situation may exist in many other countries. Search costs for markets are very high for MSMEs, and particularly for the population of refugees and displaced persons, many of whom could be confined in camps or other restricted areas. Moreover, market access remains untapped for many MSEs because their products lack the level of design appeal and quality that would make them marketable.

Abo Rabea, a Syrian artisan, is growing his business through Jedad.com.

Against this backdrop, the team implemented a scalable solution and capacity-building support to help MSEs access the market despite their fragile situations. The online platform the team created demonstrates the power of an online platform where demand and supply meet, offers are exchanged, and surpluses are created via business deals, better products, and better processes. While online business-to-business networking platforms have progressed rapidly in different parts of the world, MENA has lagged behind, even though, as recent study by PwC estimates, the approach could support a US$32 billion market in Jordan alone.

This project demonstrates that, with creative thinking and interventions, MSEs — particularly in vulnerable segments, including refugees and women entrepreneurs — can successfully tap the market in Jordan and beyond. While this initiative ends with the end of project funding, the team has prepared a hands-on toolkit that will be publicly available that can help any entrepreneurially minded firm to create a similar or even better online B2B networking platform to further advance the MSE development agenda, in MENA countries and beyond, with a focus on refugee and displaced entrepreneurial people.

In early 2020, we started to see increased uptake of potential market opportunities for many of the Jedad beneficiaries, but progress was completely disrupted by the COVID-19 pandemic. For instance, a number of restaurants had expressed interest in B2B orders of customized table wares. In the corporate gift market, price quotation offers and sample requests from Dubai Image had come in before the shutdowns, but with the disruption of Covid-19, no deals materialized. Another stalled opportunity came from international organizations, such as Mercy Corps Jordan and UNICEF, which were looking to artisanal products from Jedad beneficiaries to meet their special occasion gift needs.

Although Jordan has started to re-open, some of our beneficiaries seem to have been deeply affected by the pandemic. A number of the firms remain closed. Many businesses are also suffering from lack of availability of raw materials, partly related to global supply-chain disruptions. Shipping costs also seem to have increased significantly. Given that a global recession and economic uncertainty is likely to heavily impact consumers' discretionary spending worldwide, there is an overarching concern about a "demand slump." Moreover, while GCC is a prime market for many of our beneficiaries' products, the dual shock of COVID-19 and oil price decreases will likely depress potential demand for our beneficiaries' products from that quarter.

Nonetheless, online platform initiatives such as Jedad are likely to be highly relevant in the post-pandemic recovery period as more businesses and consumers look to enter the digital space to overcome the pandemic's consequences. In that connection, in addition to

online platforms like Jedad, which focuses on B2B sales, initiatives to promote B2C sales, for example, through Facebook, Instagram, Souk, and other popular online platforms, would be useful. Similarly, as the Jedad initiative comes to an end with the end of its project funding, consideration should also be given to the possibility of taking its beneficiary businesses as a collective alliance to an established platform such as Etsy, noting of course the challenges faced by our beneficiaries in operating in established platforms (as discussed in Section III and summarized in Table 1 above).

Finally, as a step to sustain the online networking platform initiative that Jedad represents beyond the end of its funding, the team has also prepared a practical toolkit (including coding and necessary technical details) describing how to build a similar online platform. This toolkit will be publicly available so that anybody interested can create a similar or even better platform than Jedad and advance its online business-to-business networking initiative in Jordan, MENA, and beyond.

Appendix: Descriptive Graphs and Tables

Figure A1: Nationality and Gender Distribution of Firm Ownership in the Sample

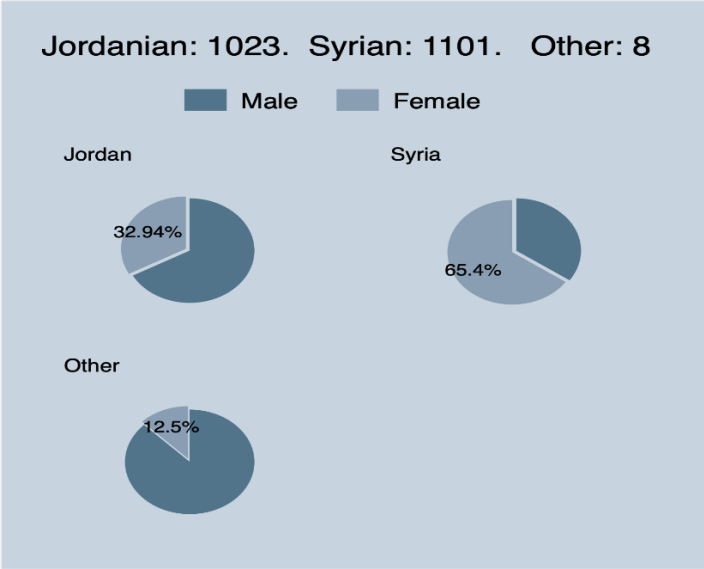


Figure A2: Suppliers' Quality: On-Time Delivery

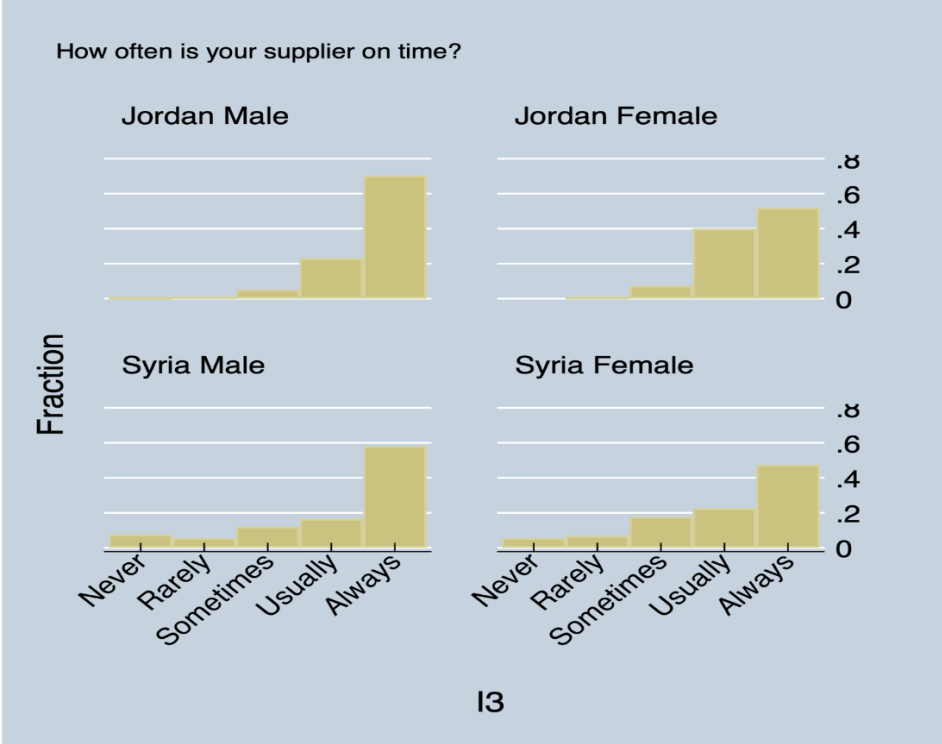


Figure A3: Suppliers' Quality: Quality of Supplies

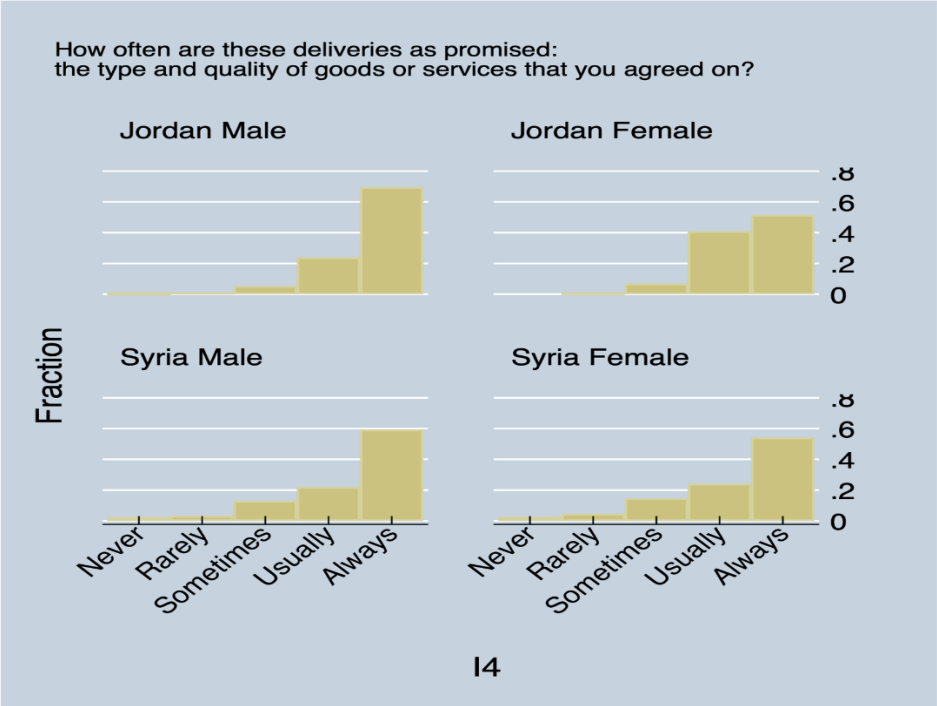


Figure A4: Perception of Fair Price from the Clients

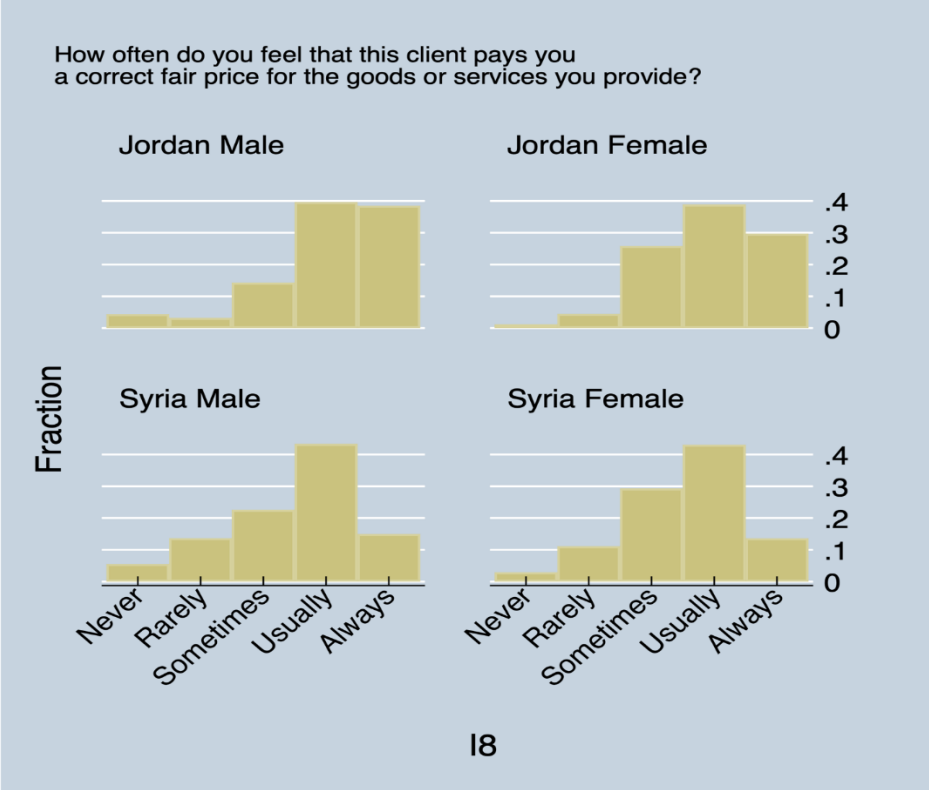


Table A1: Distribution of Costs and Revenues

	Material_cost_2017	*Labor_cost_2017*	*Utility_costs_2017*	*Rent_2017*	*Sales_revenue_2017*
JordanMale-mean	101089.12	22405.61	1746.31	6009.43	117487.51
sd	427365.16	50432.92	3879.52	13358.48	238613.46
min	0.00	0.00	0.00	0.00	-99.00
max	9000000.00	720000.00	48000.00	200000.00	2100000.00
JordanFemale-mean	4220.87	1702.79	482.06	1489.30	7666.34
sd	10962.11	6449.64	991.19	2450.54	21242.21
min	0.00	0.00	0.00	0.00	0.00
max	150000.00	70000.00	9600.00	23000.00	300000.00
SyriaMale-mean	6401.69	3361.97	191.86	664.77	13946.19
sd	46877.30	26656.10	891.34	2258.28	99800.65
min	0.00	0.00	0.00	0.00	0.00
max	800000.00	504000.00	12000.00	18000.00	1800000.00
SyriaFemale-mean	354.48	51.55	88.21	249.66	915.86
sd	911.50	504.80	472.21	1006.12	1439.71
min	0.00	0.00	0.00	0.00	0.00
max	15000.00	12000.00	12000.00	12000.00	20000.00
OtherMale_mean	3411770.71	156838.43	162234.86	5416.67	4535599.14
sd	8755822.82	253256.91	400698.71	7606.95	11478723.82
min	10000.00	4000.00	700.00	0.00	10000.00
max	23267462.00	717669.00	1070444.00	20400.00	30565194.00
OtherFemale-mean	3000.00	0.00	500.00	0.00	9000.00
sd					
min	3000.00	0.00	500.00	0.00	9000.00
max	3000.00	0.00	500.00	0.00	9000.00

Table A2: Household Consumption of Jordanian and Syrian Businesses

	Consumption	*Rent*
JordanMale-mean	561.76	224.36
sd	664.24	81.05
min	80.00	60.00
max	12000.00	650.00
JordanFemale-mean	362.04	202.62
sd	211.84	127.98
min	100.00	60.00
max	2400.00	1700.00
SyriaMale-mean	276.54	142.71
sd	129.26	46.27
min	0.00	65.00
max	1000.00	350.00
SyriaFemale-mean	226.65	151.22
sd	108.38	57.45
min	0.00	50.00
max	1200.00	1200.00
OtherMale_mean	650.00	256.67
sd	372.83	172.14
min	100.00	120.00
max	1200.00	450.00
OtherFemale-mean		
sd		
min		
max		

Table A3: Profitability and Innovation

	Profits	*CapitalReplacement*	*NewProduct*	*ShareNewProduct*	*Loan*	*FullTimeEmployees*	*PartTimeEmployees*
JordanMale-mean	16504.91	237121.72	0.18	27.60	0.06	4.79	0.37
sd	52133.87	1212582.07	0.38	22.13	0.25	10.83	2.32
min	-90000.00	0.00	0.00	0.00	0.00	0.00	0.00
max	744000.00	15000000.00	1.00	100.00	1.00	200.00	44.00
JordanFemale-mean	1420.25	14937.05	0.13	22.52	0.07	1.62	0.28
sd	6076.92	81940.46	0.34	23.15	0.26	1.71	0.62
min	-1500.00	0.00	0.00	0.00	0.00	0.00	0.00
max	80000.00	750000.00	1.00	100.00	1.00	19.00	4.00
SyriaMale-mean	2405.12	3166.32	0.29	31.37	0.41	3.96	0.26
sd	14639.65	18411.25	0.45	20.96	0.49	17.52	0.87
min	0.00	0.00	0.00	0.00	0.00	0.00	0.00
max	200000.00	200000.00	1.00	100.00	1.00	207.00	5.00
SyriaFemale-mean	200.55	191.67	0.28	27.19	0.47	0.61	0.24
sd	549.84	599.70	0.45	20.44	0.50	0.89	0.75
min	0.00	0.00	0.00	0.00	0.00	0.00	0.00
max	3000.00	5000.00	1.00	100.00	1.00	3.00	3.00
OtherMale_mean	109694.33	73333.33	0.14	25.00	0.29	30.17	1.00
sd	90413.14	87368.95	0.38		0.49	42.43	2.45
min	0.00	0.00	0.00	25.00	0.00	3.00	0.00
max	220000.00	170000.00	1.00	25.00	1.00	115.00	6.00
OtherFemale-mean	6000.00		1.00	15.00	0.00		
sd							
min	6000.00		1.00	15.00	0.00		
max	6000.00		1.00	15.00	0.00		

Table A4: Networks of Suppliers and Customers for Syrian and Jordanian Businesses

	Suppliers2017	*Suppliers*	*Clients2017*	*Clients*	*SupplierYear*
JordanMale-mean	7.57	4.33	1159.51	293.48	2010.99
sd	7.86	5.53	4458.35	4168.72	6.86
min	0.00	0.00	0.00	0.00	1974.00
max	50.00	70.00	40000.00	80000.00	2019.00
JordanFemale-mean	4.83	2.55	134.46	15.42	2014.78
sd	4.59	1.79	553.72	42.53	3.05
min	0.00	0.00	0.00	0.00	2000.00
max	25.00	15.00	6500.00	600.00	2018.00
SyriaMale-mean	2.48	1.88	482.59	37.52	2016.47
sd	5.91	1.60	6484.62	476.61	2.70
min	0.00	0.00	0.00	0.00	1996.00
max	100.00	11.00	120000.00	9000.00	2019.00
SyriaFemale-mean	1.24	2.31	14.53	7.32	2017.65
sd	3.14	1.55	27.79	8.50	1.15
min	0.00	0.00	0.00	0.00	2007.00
max	60.00	10.00	200.00	80.00	2019.00
OtherMale_mean	12.00	7.86	68.75	2.00	2006.57
sd	5.74	7.01	97.01	1.00	3.95
min	2.00	2.00	4.00	1.00	2000.00
max	20.00	20.00	211.00	3.00	2010.00
OtherFemale-mean	5.00	1.00	40.00	6.00	
sd					
min	5.00	1.00	40.00	6.00	
max	5.00	1.00	40.00	6.00	

References

Acemoglu, Daron, Vasco M. Carvalho, Asuman Ozdaglar, and Alireza Tahbaz-Salehi. 2012. "The Network Origins of Aggregate Fluctuations." *Econometrica* 80: 1977–2016.

Allcott, Hunt, Allan Collard-Wexler, and Stephen D. O'Connell. 2015. "How Do Electricity Shortages Affect Industry? Evidence from India." *American Economic Review*: forthcoming.

Amiti, Mary, and Jozef Konings. 2007. "Trade Liberalization, Intermediate Inputs, and Productivity: Evidence from Indonesia." *American Economic Review* 97 (5): 1611–38.

Antras, Pol, and Davin Chor. 2013. "Organizing the Global Value Chain" Econometrica 81 (6): 2127–04.

Atkin, David, Amit K. Khandelwal, and Adam Osman. 2015. "Exporting and Firm Performance: Evidence from a Randomized Trial." NBER Working Paper No. 20690, National Bureau of Economic Research, Cambridge, MA.

Banerjee, Abhijit, and Esther Duflo. 2014. "Do Firms Want to Borrow More? Testing Credit Constraints Using a Directed Lending Program." *Review of Economic Studies* 81: 572–607.

Barrot, Jean-Noël, and Julien Sauvagnat. 2015. "Input Specificity and the Propagation of Idiosyncratic Shocks in Production Networks." Working Paper.

Bernard, Andrew B., Andreas Moxnes, and Yukiko U. Saito. 2015. "Production Networks, Geography and Firm Performance." NBER Working Paper 21082, National Bureau of Economic Research, Cambridge, MA.

Bloom, Nicholas, Benn Eifert, Aprajit Mahajan, David McKenzie, and John Roberts. 2013. "Does Management Matter? Evidence from India." *Quarterly Journal of Economics* 128: 1–51.

Bruhn, Miriam, Dean Karlan, and Antoinette Schoar. 2013. "The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico." World Bank Policy Research Working Paper.

Cai, Jing, and Adam Szeidl. 2016. "Interfirm Relationships and Business Performance." NBER Working Paper 22951, National Bureau of Economic Research, Cambridge, MA.

Calderon-Guamez, Gabriela, Jesse Cunha, and Giacomo de Giorgi. 2013. "Business Literacy and Development: Evidence from a Randomized Trial in Rural Mexico." NBER Working Paper 19740, National Bureau of Economic Research, Cambridge, MA.

Carvalho, Vasco M., Makoto Nirei, Yukiko Umeno Saito, and Alireza Tahbaz-Salehi. 2014. "Supply Chain Disruptions: Evidence from the Great East Japan Earthquake." RIETI Discussion Paper 14-E-035, Research Institute of Economy, Trade and Industry, Tokyo.

Chaney, Thomas. 2014. "The Network Structure of International Trade." *American Economic Review* 104 (11): 3600–3634.

Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review* 106 (4): 855–902.

De Mel, Suresh, David McKenzie, and Christopher Woodruff. 2008. "Returns to Capital in Microenterprises: Evidence from a Field Experiment." *Quarterly Journal of Economics* 123 (4): 1329–72.

Eaton, Jonathan, Samuel Kortum, and Francis Kramarz. 2015. "Firm-to-Firm Trade: Imports, Exports, and the Labor Market." Working Paper.

Fafchamps, Marcel, and Simon Quinn. 2016. "Networks and Manufacturing Firms in Africa: Results from a Randomized Field Experiment." *World Bank Economic Review,* forthcoming.

Halpern, László, Miklós Koren, and Adam Szeidl. 2015. "Imported Inputs and Productivity." *American Economic Review* 105 (12): 3660–703.

Haselmann, Rainer, David Schoenherr, and Vikrant Vig. 2016. "Rent-Seeking in Elite Networks." Working Paper, Goethe University, Frankfurt, and London Business School.

McKenzie, David, and Christopher Woodruff. 2014. "What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World?" *World Bank Research Observer* 29: 48–82.

McMillan, John, and Christopher Woodruff. 1999. "Interfirm Relationships and Informal Credit in Vietnam." *Quarterly Journal of Economics* 114: 1285–320.

Oberfield, Ezra. 2013. "Business Networks, Production Chains, and Productivity: A Theory of Input-Output Architecture." Working paper.