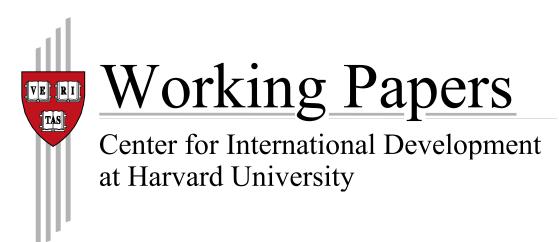
A Survey of Importers

Results of a Survey Conducted in Collaboration with the Ethiopian Economics Association

Ricardo Hausmann, Tim O'Brien, Tim Cheston, Nikita Taniparti, Ibrahim Worku Hassen, Can Soylu, Lucas Lamby, and Pablo Andrés Neumeyer

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¹ Universidad Torcuato Di Tella

Contents

Executive Summary
I. Introduction & Motivation
II. Survey Operations
Implementing Partner
Sampling Design & Methodology
III. Survey Findings
Import Status & Firm Characteristics7
Business Challenges
Forex Access in the Banking System14
Navigating the Forex Constraint
Exchange Rate Passthrough to Prices
Willingness to Pay for Foreign Exchange
Policy Perceptions
IV. Key Findings & Lessons for Future Surveys
Key Findings
Lessons Learned for Future Surveys
Appendix A – Survey Sampling & Questionnaire
Appendix B – Forex Access Modalities & TWER

Executive Summary

Ethiopia suffers from a chronic shortage of foreign exchange (forex).¹ The resulting lack of access to imports prevents firms from accessing imported inputs required for production. This creates a vicious cycle as exporters are constrained by this same problem, which further reduces overall supply of foreign exchange in the Ethiopian economy. The inability to reliably access foreign exchange for imports affects firm decisions on sourcing, capacity, and output. While the cost of this constraint is known to be high on the Ethiopian economy and firms are known to use a range of measures to attempt to bypass this constraint, quantitative assessments of the problem and response actions by firms are limited. It is in this context that an importer survey was conducted with the goal of informing policy decisions. A total of 202 firms with an active importing license were interviewed in March-April 2022. These firms were randomly sampled from firms registered with an importer license.

All firms interviewed reported that they were operating below capacity, often well below capacity. Foreign exchange shortages were the main reason respondent firms cited for not operating at full capacity (63% of firms reporting this as their biggest constraint). Forex shortages far surpass the second and third reasons cited for not operating at full capacity — constraints due to the conflict (13%) and COVID-19 restrictions (11%). Firms operating below capacity cited forex shortages as the main constraint, regardless of whether they imported or not in the previous year. This was the most pressing constraint reported by firms of all sizes and sectors surveyed. It was the most pressing constraint faced by exporters and by foreign-owned firms as well as non-exporters and domestic firms. Amongst the total sample of firms with a renewed importer license, more than one-third of respondent firms (37%) had not imported in FY2020-21.

Overall, 74% of firms reported experiencing challenges in accessing forex. Access to forex was reported as most challenging for manufacturing firms and smaller firms but impacted all sectors and firm sizes. The losses attributed to forex scarcity at the firm level were largest for agricultural firms, for micro-firms, and for firms that did not import at all in the previous year. In general, the larger the firm sales, the higher the likelihood that they were able import. The survey found different types of imports for different sectors. Manufacturing firms imported a large share semi-finished goods as imports as compared to agricultural firms that primarily imported finished goods. The survey results find that foreign exchange shortages and an inability to import are most severe for the manufacturing and agriculture sectors, small and micro-sized firms, and all non-exporters. However, the constraint is also the top problem facing all firm types in the survey, including exporters and foreign-owned firms.

The primary means of accessing foreign exchange where it did occur was through specialized forex accounts or 'diaspora' accounts. The second most common means of accessing foreign exchange

¹ See "Development in a Complex World: The Case of Ethiopia" – the Growth Lab's compendium of project research from its *Advancing Economic Diversification in Ethiopia* project.

was through retention accounts available to exporters. The black market featured in many responses, but questions across the survey suggest that self-reported use of the black market by survey participants is underreported versus actual usage. The ability to source foreign exchange differed significantly by firm size. Exporting firms primarily used retention account earnings, as compared to non-exporters, which relied more on forex accounts. For faster access to forex, most firms reported that they approach banks, followed by turning to the black market. Friends and family abroad also served as a source of forex for one-quarter of firm respondents, and that foreign exchange was often used immediately. Foreign exchange access from banks is nevertheless a major pain point for firms. Most firms (55%) requested forex from a bank in the past year. On average, fulfilled forex requests took three months to be processed when they were fulfilled, but many firms reported that they have an unfulfilled request that has been in the system for more than a year. These firms are especially likely to report foreign exchange access as their top challenge.

The survey finds that individual firms do not tend to use both official and black-market foreign exchange sources but rather tend to access all their forex at the (lower) official rate or all at the (higher) black-market. Large firms import most of their products at the official rate. By contrast, most small and micro firms import through other means. Manufacturing firms are also more likely to import all their production through other means and outside of the banking system. Non-exporting firms tended to import through other means than the official rate and outside of the banking system at a higher prevalence than exporting firms. The survey gleaned new insights on the implicit exchange rate that firms face as they navigate official and black-market channels of foreign exchange access. The survey does not allow for a precise estimate of the transaction-weighted exchange rate facing the economy but finds firm-level estimates align with previous macro-level estimates. The implicit exchange rate to access imports. This signals the importance of the retention account for exporters to guarantee an import price closer to the official exchange rate.

When asked about the maximum rate firms would pay to guarantee access to forex, some groups of firms were willing to pay higher amounts, including all non-exporters, firms that imported in the past year, and those that declared forex access a challenge. When compared to the implied rate they paid in the past year, many firms are willing to pay more than the implied rate to guarantee access to forex. Firm perspectives on policy changes to the exchange rate underscored challenges faced by policymakers. Current policy has been one of a crawling peg, with changes within the last several years to increase the rate of devaluation. The survey asked respondents about their support for faster devaluation, for a one-off movement to unify the official rate with the black-market rate, or about alternative exchange rate systems such as a floating exchange rate. Most respondents (71%) opposed maintaining the current regime, yet no option received majority support. Most firms appear to want both a stronger exchange rate and easier access to foreign exchange despite a tradeoff between these two priorities. The largest share of support for policy change rate such that the official rate matches the black-market rate.

I. Introduction & Motivation

The chronic scarcity of foreign exchange (forex) is widely recognized as a major constraint to economic output in Ethiopia. Accessing forex for import purchases is a regular concern for firms, and growth diagnostic research points to this problem as the binding constraint that has caused Ethiopia's growth process to slow since 2015.² Existing data on firms, imports, and markets in Ethiopia points to an increasingly severe constraint that undermines Ethiopia's rapid economic growth. In addition, qualitative and anecdotal evidence abounds regarding the lengths to which firms and individuals go to get around the system to find the few dollars they need. One clear signal that this dynamic is worsening with time is a widening gap between the black-market exchange rate and official exchange rate (i.e., an increasing black-market premium).

However, existing data do not allow for a detailed understanding of firm-level decisions in response to the forex constraint nor analysis of firm-level characteristics in combination with firm-level behaviors and perceptions. Existing data also do not provide a basis for understanding how much of import activity occurs at the official and black-market rates. Uncovering such information would allow for a better estimation of key macroeconomic variables that could inform new policy actions to address this constraint. This survey was designed and executed to begin to address such gaps in information. In particular, the survey aimed to estimate a "transaction-weighed exchange rate" (TWER) that would capture the exchange rate reflective of the economy as a whole based on the share of importers using the official rate and the share of importers using the black-market rate.

Therefore, the aims of this importer survey were to systematically explore how firms attempt overcome the forex constraint, uncover macroeconomically significant variables, and to develop an approach that could be used to track the ability of firms to efficiently access forex over time, especially in response to policy changes that are implemented to relax the forex constraint. With this information, policy officials and public policy actors in Ethiopia could better target reforms aimed at improving the supply of forex and facilitating broad-based access to forex for importers across all sectors. This survey was intended to serve as an initial benchmark, which later iterations of the survey could compare against to track changes.

The next section of this report summarizes survey operations. Interested parties may contact the Growth Lab or the Ethiopian Economics Association for further information. We then discuss survey findings as analyzed by the Growth Lab from anonymized survey data. This summary of findings does not follow the order of questions in the survey, but instead aims to identify patterns revealed from across the survey sections. Relevant question numbers are indicated alongside the discussed results. The final section summarizes key findings and discusses lessons for future use and adaptation of this survey approach.

² See "Development in a Complex World: The Case of Ethiopia" – the Growth Lab's compendium of project research from its *Advancing Economic Diversification in Ethiopia* project.

II. Survey Operations

Implementing Partner

The Ethiopian Economics Association (EEA) served as the survey implementation partner for this effort. The EEA has existed for over 20 years as a non-profit and independent professional organization with a wide agenda of research focus areas and expertise. It is actively engaged in research, technical trainings and workshops, convening international and domestic thought partners, and disseminating its research through publications and conferences. The EEA's role in this effort included implementing a pilot survey of 30 import-eligible firms as well as the full survey of approximately 200 firms reported on here. Based on an initial questionnaire developed by the Growth Lab, the EEA further refined and translated questions, organized firm sampling, developed interview and data collection tools, hired and trained enumerators, and performed data collection through in-person surveys. As the data collection entity, EEA also hosted and stored all survey data. Identifying information on firms and respondents was kept separate from response data, and only anonymized response data was provided to the Growth Lab after the completion of the survey. The full survey effort was funded by USAID through its "Advancing Economic Diversification in Ethiopia" project with the Growth Lab at Harvard University.

Sampling Design & Methodology

The EEA collected a national list of firms with an import license from the Ministry of Trade and Industry in Ethiopia (MoTI), which represents the only official comprehensive list of such firms. This was the basis for a sampling strategy. Firms were sampled among those with an address in Addis Ababa or with liaison representatives in Addis Ababa. This was due in part to the conflict occurring in the country at the time of the survey. However, this did not result in a loss of coverage since such firms accounted for 99% of the population of firms in the national list. Next, the population of firms for sampling was limited to firms that renewed their business license in 2020 and 2021. Firms with duplicate import license numbers were dropped to account for single instances of each firm.

The sampling was done using a two-stage random sampling technique based on a categorization of economic sector used by EEA and citizenship of the firm ownership. The first stage identified five main economic sectors that importers were categorized into; and the second stratification split firms between those domestically owned and those owned by foreigners. A total of 200 firms were randomly sampled across these groups. Firms were contacted initially by phone by EEA's survey manager and invited to participate. Many respondents declined to participate at this time. The survey manager noted that firms declined to participate primarily for two reasons. One was the sensitivity of the topic and the other was that firms who had not imported at all in the last year believed that they would not be able to provide relevant information for the survey because of this

lack of importing.³ These reasons given suggest that this survey likely underrepresents use of the black market and firms who did not import at all. Those who agreed were interviewed in-person by an EEA survey enumerator. Appendix A.1 provides the distribution of firms and sampled firms across economic sector and citizenship of ownership status.

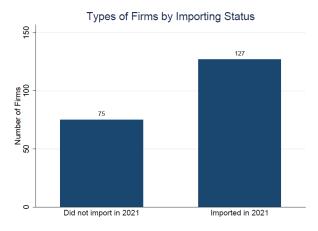
The survey was designed over the period of June-December 2021. A pilot phase of 30 survey respondents was completed in January 2022. Based on the results of the pilot phase, which tested survey operations and question clarity, the Growth Lab and EEA revised the questionnaire prior to the full survey of approximately 200 firms. Several survey questions were adapted based on clarity, a few were removed (for example, detailed questions on imports by HS code), and several questions were added to explore surprising trends (for example, very low reported business activity in relation to operational capacity). The full sample of 202 firms was interviewed in March and the first week of April 2022. During each interview, after obtaining consent from the firm representative, the survey took approximately 30 minutes to complete on average. Survey questions related to business operations, foreign currency access and challenges, and policy perceptions. Respondents were allowed to skip any questions where they were unsure or preferred not to answer. Appendix A.2 provides the survey questionnaire in English.

³ The number of firms who declined to participate and data tracking the reasons provided was not made available by EEA to the Growth Lab.

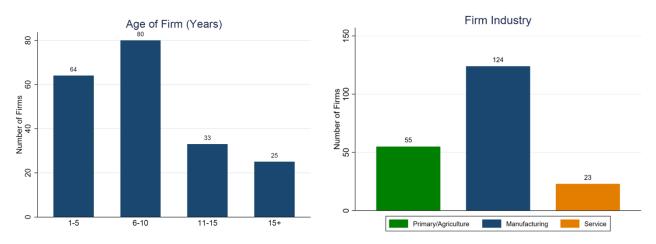
III. Survey Findings

Import Status & Firm Characteristics

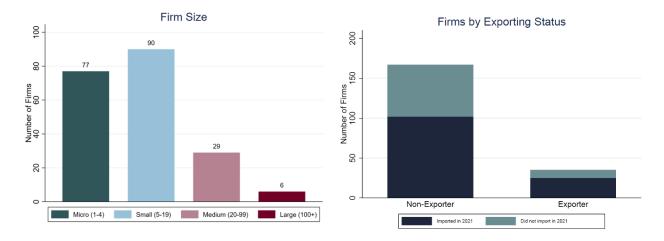
Many importers did not import despite having a renewed license. Approximately 37% of firms surveyed reported no imports during the latest fiscal year [Question 2: Did the firm import in 2021?]. Among those firms that did not import in 2021, just over 40% had imported in the last two years and another 40% had imported in the last 2-4 years. There were 15% of firms that did not import in 2021 who reported never having imported. [Question 2.1: If the firm didn't import, when was the last year the firm imported?]



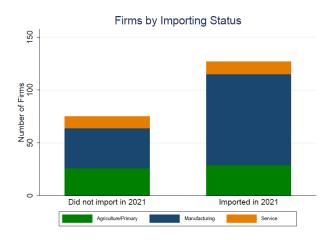
Most (71%) of the firms in the survey were established in the last 10 years, with 12% of firms reported established more than 15 years ago. [Question 11: Year of establishment of the firm] A majority (61%) of sampled firms were in the manufacturing sector, while 27% of firms were engaged in primary or agricultural production, and 11% of firms surveyed reported being engaged in the service sector. [Question 18: Business sector in which the firm is operating?]



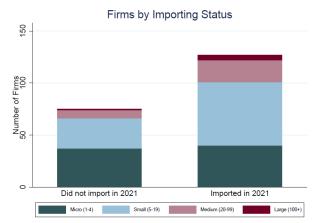
Firm size was taken as a combined measure of permanent and temporary workers. [Question 13: Number of employees working in the firm in the last fiscal year?] Firms are classified as, micro (1-4 workers), small (5-19 workers), medium (20-99 workers), or large (100+ workers). Most firms were micro or small, and only 3% of the sample was large firms. A relatively small share of firms were exporters (17%), and most exporters reported importing in FY 2020-2021. [Question 28: Does the firm engage in exporting?] Consequently, those firms that imported were disproportionately likely to be exporters, but still most importing firms did not export.

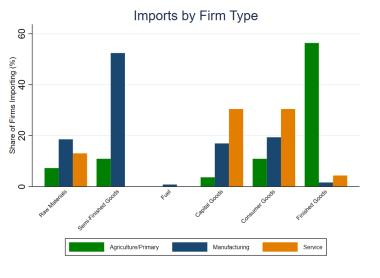


Among the firms that did not import in the last year despite having a renewed license, these were also disproportionately likely to be in manufacturing or of larger size. Agriculture, services, and micro-sized firms were most disproportionately represented among firms that did not import in the last year — whether by choice or by necessity.



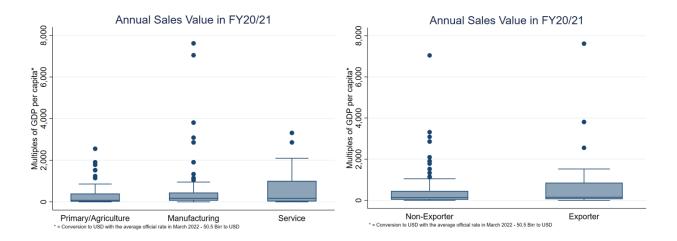
When looking at what types of goods firms imported, the survey shows that manufacturing firms that imported mostly imported semi-finished goods, whereas agricultural firms mostly imported finished goods. Service sector firms reported higher shares of capital and consumer goods imports, perhaps for further sale through retail activity. [Question 25: Which type of products has the firm imported within the last fiscal year?]



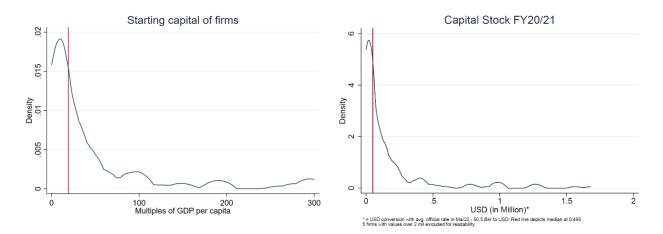


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To understand scale of firms beyond the number of employees, the survey asked about sales volume and capital. While median sales volumes did not vary greatly by sector or by whether a firm exported, there were notable differences in the distributions. The larger half of service sector firms in the sample had much higher sales volumes than the larger half of other sectors as captured by the 75th and 90th percentile firms. However, there were several outlier manufacturing firms with high sales volumes. Exporting firms also had higher sales volumes at the 75th and 90th percentiles than non-exporting firms while several non-exporters were outliers. *[Question 23: What was the approximate annual sales value of the firm in the last fiscal year 2020-2021?]*

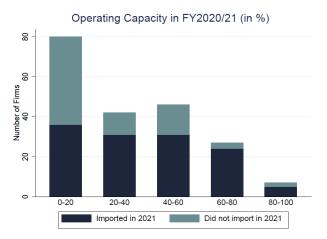


Responses on capital did not reveal strong patterns as most firms in the survey report a relatively low starting capital. [Question 12: Initial/starting capital of the firm?] The median starting capital (red line in the figure, where the data was top coded at 300) stands at 19.4 times the GDP per capita of Ethiopia. Likewise, the current capital stock was also skewed towards the lower end. [Question 24: What is the approximate capital stock of the firm in the last fiscal year 2020-2021] The median capital stock in FY 2020-2021 was USD 495,000. There were a few high outliers, and five firms with reported capital stock higher than USD 2 million.

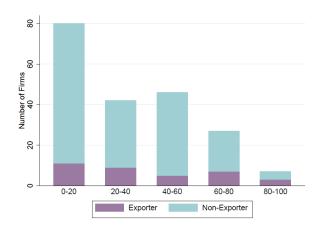


Business Challenges

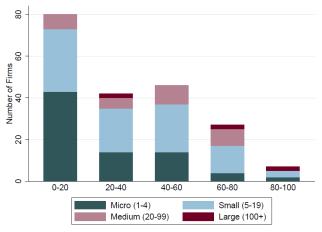
Most firms operated well below their operating capacity based on a self-reported assessment. [Question 19: At what capacity did the firm operate in the last FY 2020-2021 (estimated output as % of potential)?] Nearly 83% of all firms reported operating below 60% of their total capacity, with almost 40% of surveyed firms operating at below 20% capacity. Those that operated at above 60% tended to be firms that imported.



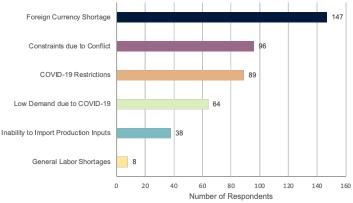
Exporting firms operated at a range of capacities, but exporters made up a larger share of firms operating near full capacity. Of firms that operated between 0-20% of capacity, more than half were micro-firms. Responses on this question did not vary substantially by sector (not shown).



The main reasons cited by firms for not operating at full capacity included foreign exchange shortages, conflictdriven constraints, and COVID-19 restrictions. [Question 20: If the firm operated below 100%, what were the main reasons?] "Foreign currency shortages" was not an option provided in the survey, as "inability to import production inputs" was intended to represent this constraint. However, firms wrote in this response as "other".

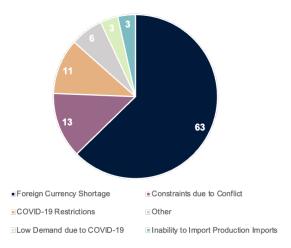


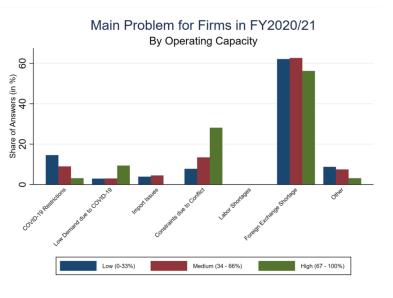


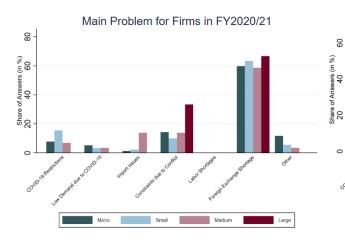


When asked to choose the most important constraint, 63% of firms reported foreign currency shortages as their main challenge, far above the second and third most cited constraints of conflict and COVID-19 restrictions. [Question 21: If the firm operated below 100%, what was the most important (main) reason for operating below potential in FY 2020-2021?] Forex shortages were the top reported constraint firms who operated at low, medium, and high capacity also reported being affected by the conflict relatively more frequently.

Forex was also the main constraint reported by firms of all sizes and sectors. Large firms seem to be affected by the conflict more than other firms, while the service sector seemed to be more impacted by COVID-19 restrictions than others. Forex shortages were a more frequently reported challenge for importing firms than non-importers (not shown), but forex impacted both more than any other constraint. Forex was also the top reported constraint for foreign firms and exporters (not shown). Most Important Constraint (in %)





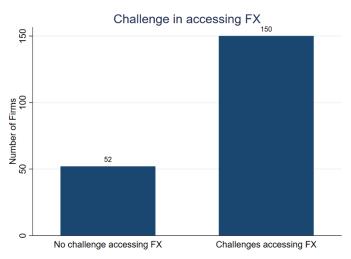




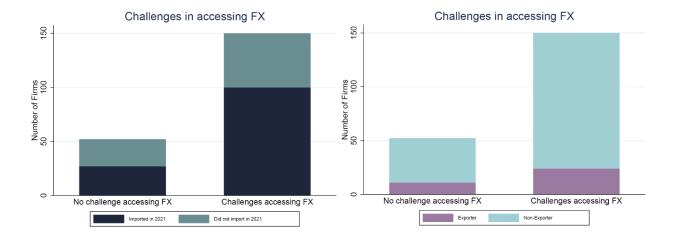
Manufacturing

Firms were asked a series of questions about their use of the banking system. This included a question of whether firms have trouble accessing finance in general in local currency. Almost half (48%) of firms responded that they do. *[Question 41: Does the firm face challenges in accessing loans in local currency?]* But when asked about forex in particular, the number of firms reporting challenges was much higher (74%). *[Question 43: Does the firm face challenges in accessing forex or forex loans?]*

This challenge was common to importers and non-importers alike. It was also common to exporters and non-exporters and both foreign and domestic firms. However, there were clear differences by sector. Accessing forex or forex loans was more commonly reported as a challenge for manufacturing firms versus other sectors. This is consistent with services firms being somewhat less likely to see forex as their main constraint — though still the topreported constraint.



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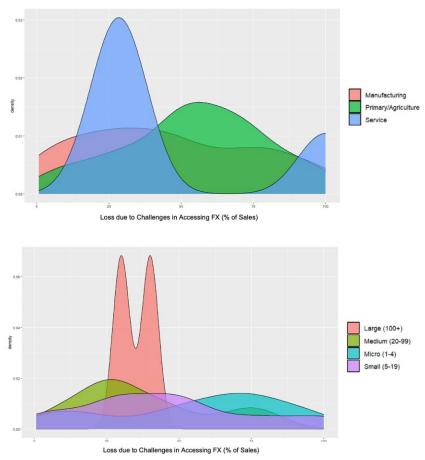


Challenges in accessing FX Loans

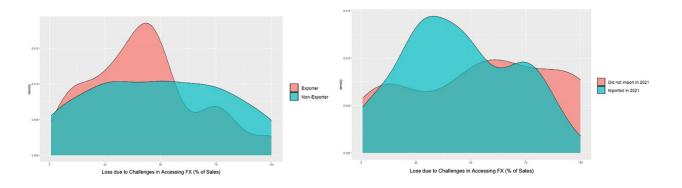
Firms were also if they reported "significant" losses due to forex scarcity. [Question 45: Did the firm face significant losses associated to the challenges in accessing forex in the last fiscal year?] Approximately 60% of manufacturing and agriculture firms reported that they did, while less than 20% of service sector firms did. More than 50% of importers, non-importers, exporters, non-exporters, foreign-owned firms and domestic firms all reported significant losses due to forex.

For firms that reported significant losses, firms in agriculture reported higher losses and manufacturing firms reported lower losses overall, though both sectors saw a large range of answers. [Question 46: How much loss is associated with challenges in accessing forex]

Responses also showed a pattern by size on this question. Micro-sized firms tended to face the highest losses as a share of sales, followed by small firms, followed by medium and large firms. Unlike the other sizes, all the large firms reported less than 50% of sales undermined by the constraint.

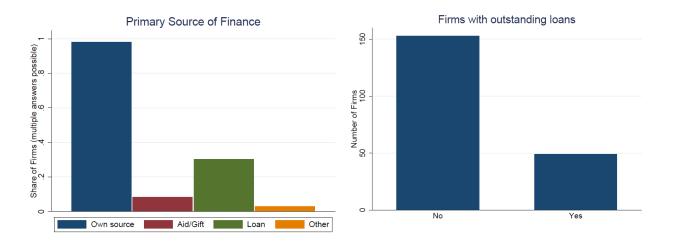


Exporters tended to see lower losses due to the forex constraint than non-exporters. Perhaps not surprisingly, importers (who managed to access some forex) tended to see lower losses than non-importers, though the range of losses was very large for importers and non-importers alike.



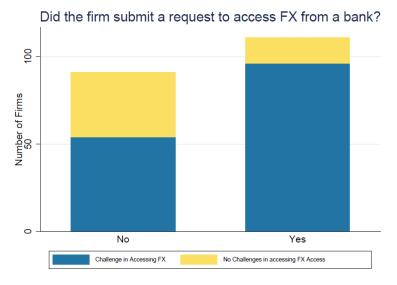
Forex Access in the Banking System

As summarized above, roughly three-quarters of firms surveyed reported challenges in accessing forex or forex loans (see Question 43), which is higher than the roughly half of firms who reported challenges in accessing bank loans in local currency (see Question 41). The survey also found that most firms rely on their own source of (local currency) finance, and only a quarter of firms used loans as their primary source of finance. *[Question 37: What is the primary source of finance for the firm?]* Similarly, one-quarter of all surveyed firms had an outstanding loan at the time of the survey. *[Question 33: Does the firm currently have outstanding loans at any of these banks?]*. This suggests that firms are more reliant on the banking system for forex than for local currency.



Meanwhile, 55% of firms in the survey had submitted a request to access forex from a bank in the last fiscal year. [Question 48: Did the firm submit a request to a bank for accessing forex in the last FY?]

On average, firms who had submitted a request to a bank, have had that request pending for approximately 11 months (median of approximately 9 months). [Question 49: If yes for Question 48 above, how long has this been pending?] Among firms that submitted a request for foreign exchange to a bank, a large majority reported experiencing challenges in accessing forex. A slight majority of firms who did not submit any request for forex from a bank also reported challenges in accessing forex.

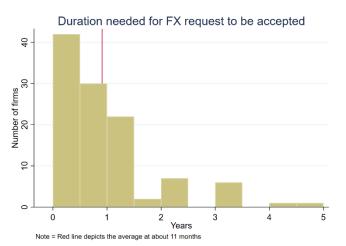


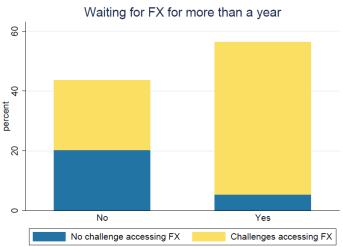
The survey confirms that when firms submit a request for foreign exchange to banks, it often takes a long time for the request to be accepted and approved. [Question 50: If the forex request was granted for 2020-2021 FY, how long did it take to process?] On average, it took approximately three months (median of one month) for firms to have their forex requests that were ultimately granted.

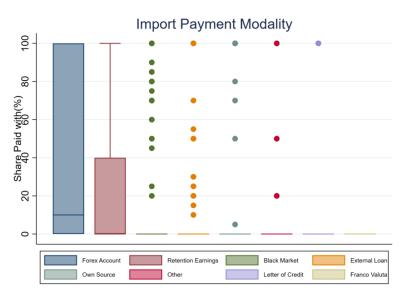
Many firms had outstanding requests for forex that were yet to be granted. When asked if firms were "in line" to access foreign exchange for more than a year, almost 60% of firms responded yes, with nearly all those firms reporting significant challenges in forex access. Among those that waited less than a year, just more than half reported forex access was a challenge. [Question 51: Have you been in line for more than a year to access forex?]

Navigating the Forex Constraint

The survey included many questions to try to understand firm-level behaviors to access foreign exchange through known modalities, both legal/formal as well as illegal/informal (see Appendix B.1. Firms were asked questions about the sources that they turn to for foreign exchange access to make import purchases. [Question 27: What is the rough share of imports you obtained through the following payment modalities?]





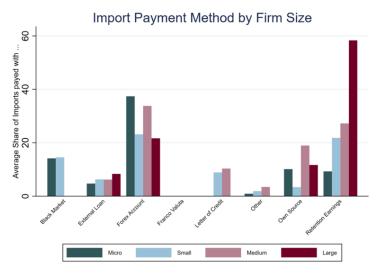


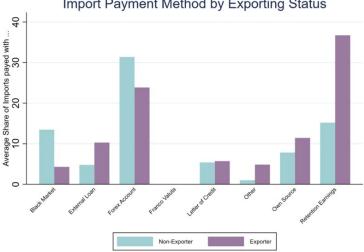
Firms used a range of mechanisms. The most common modality used by firms who reported importing in FY 2020-21 were diaspora-linked accounts (labeled as "Forex Account" in the survey), which is a formal system that is allowed at commercial banks. The figure reflects that more than half of firms used this modality with the median firm using it for 10% of imports while more than 25% of firms used it for all their imports.

Many importers also used retention accounts, which allow exporters to retain some of their earnings in foreign exchange in a bank account. Since most firms do not export, the median firm did not report using this modality, but those who can do use the modality. A small minority of firms self-reported using the black market for forex access for import purchases - likely an underestimate — and those that did ranged from 20% to 100% of their import purchases. This was a similar response to use of external loans. Surprisingly, none of the surveyed firms reported importing through a Franco Valuta license, which is known from National Bank of Ethiopia quarterly and annual reports to represent a third or more of total imports in recent years.

There was some variation on reported modalities by firm size. Micro-sized firms use diaspora/forex accounts and the black-market for importing most often. Small- and medium-sized firms report using diaspora/forex accounts and retention accounts most often, followed by the black market for small firms or own source for medium-sized firms. Large firms relied primarily on retention earnings followed by diaspora/forex accounts.

Exporters, unsurprisingly, reported higher rates of using retention earnings for accessing foreign exchange. More surprisingly, non-exporters also were able to use these accounts. Exporters and non-exporters alike also used diaspora/forex accounts, while nonexporters were more likely to selfreport using the black market for forex access for some of their import purchase. Exporters reported more use of external loans. Foreign firms (not shown) primarily used diaspora/forex accounts.

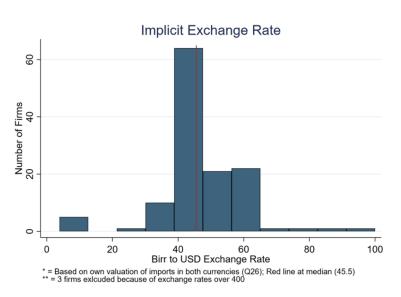






In addition to capturing the detail of how firms access foreign exchange, several questions were designed to estimate (and cross-check) the transaction-weighted exchange rate in different ways. See Appendix B.2 for an introduction to the TWER and macro-level estimations, which place the TWER roughly halfway between the official and black-market exchange rates.

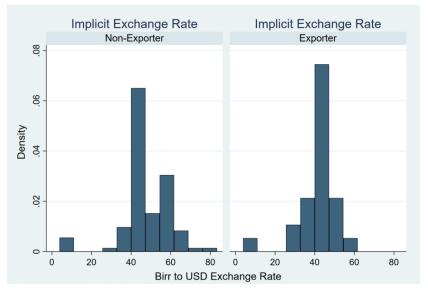
The first approach was to simply ask firms the total value of their imports in both Ethiopian Birr and USD and calculate the rate directly by firm. [Question 26: What was the approximate total value of the import over the last FY (2020-2021)? In ETB and USD?] This resulted in significant variation. The median implicit rate resulting from this survey question was approximately 45 Birr/USD with responses skewing toward the higher end.



It was likely a challenge for respondents to approximate these totals for an entire fiscal year. Several firms' responses amounted to impossibly low exchange rates (in Birr-to-USD). It also proved difficult to analyze these responses given that both the official and black-market rates varied over the course of the fiscal year and import purchases could have occurred at any point during the year. Over the fiscal year, the official rate moved largely steadily from 35 Birr/USD to 45 Birr/USD, so we can take an average of close to 40 Birr/USD for the period. Based on unofficial sources, the black-market rate over the period moved from close to 45 Birr/USD at the start of the fiscal year to upwards of 60 Birr/USD at the end. The upward path was not as steady for the black-market, but the average black-market rage for the period could be considered close to the midpoint of 52.5 Birr/USD. The black-market premium over the period was around 30% for most of the year but trended higher early in 2021.

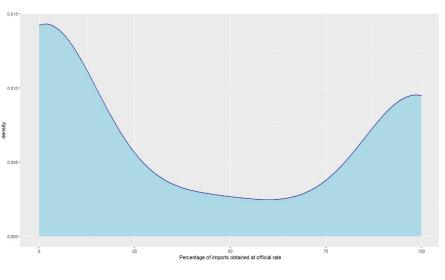
The implicit rates reported by firms in the survey tended to be higher than the official rate for the year and lower than the black-market rate in most cases. The median implicit rate of 45 Birr/USD was roughly midway between the official and black-market rates, though slightly closer to the official rate, in line with the Growth Lab's previous macro-level estimates. However, the survey responses did not allow for a precise estimate. They do emphasize a wide range of firm experiences in the implicit exchange rate paid to access imports.

It is also informative to also see variation in the implicit exchange rate by importer type. For example, there was more variation and higher overall rates resulting for nonexporters versus exports. This is possibly due to the formal ability of exporters to access through forex retention accounts. While the mode response for both is close to the overall median, non-exporters have more responses at upwards of 60 Birr/USD.



A later survey question aimed to cross-check exchange rates by asking firms what proportion of imports was obtained at the official rate (assuming the rest was obtained at the black-market rate). *[Question 59: What proportion of imports was obtained at official rate as a share of total?]*

Firms tended to report that all or none of their imports were obtained at the official rate, with a higher share reporting none at the official rate (44%) than all at the official rate (31%). It is unclear what some foreign exchange channels would register as for this question,⁴ but it suggests that the black-market rate may often apply rather than the official rate.



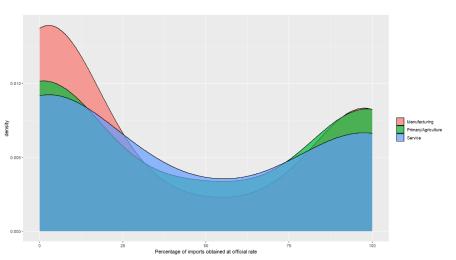
Given our uncertainty on whether responses on this question indicate use of the black-market rate or something else, we do not attempt to calculate a TWER based on this question. Responses can still be broken down by firm type to observe patterns.

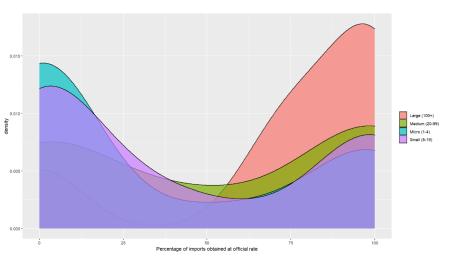
⁴ For example, a diaspora/forex account may not be considered as operating at the official rate but also would not indicate use of the black market.

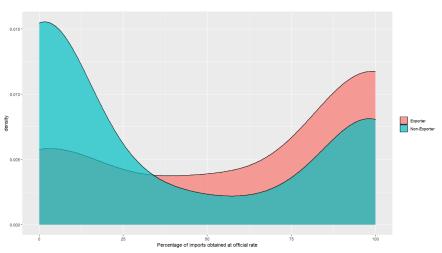
All sectors followed a similar pattern, but manufacturing firms were more likely to obtain imports at the two extremes — all at the official rate or none at the official rate and were especially more likely to access all of the forex through means other than the official rate.

The few large firms in the sample tended to be different than other firms in their tendency to access all their forex for imports at the official rate. Small and micro-sized firms were more likely to access all their forex for imports through means other than the official rate.

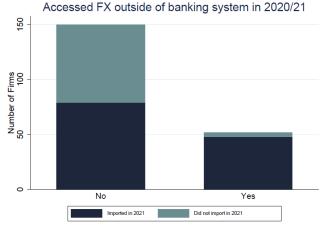
Firms that did not export were also more likely to access all of their forex for imports through means other than the official rate, whereas exporters were more able to access imports at the official exchange rate. This is consistent with the implicit exchange rates resulting from Question 26.



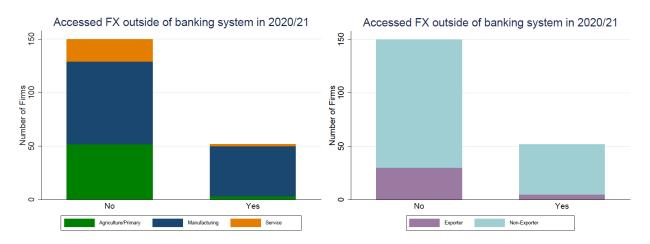




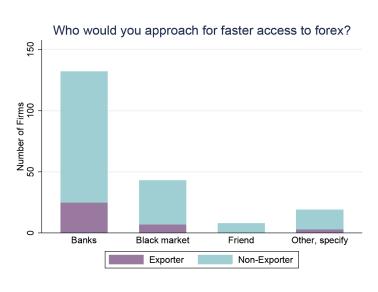
Firms were also asked if they access foreign exchange outside of the formal banking system as another way to explore black market utilization. [Question 53: Did the firm have to exchange currency outside of the banking system to access forex in the last FY?] On this question, 26% of firms reported doing so. Most of these firms imported in the FY 2020-2021. This again suggests higher black-market utilization than Question 27.



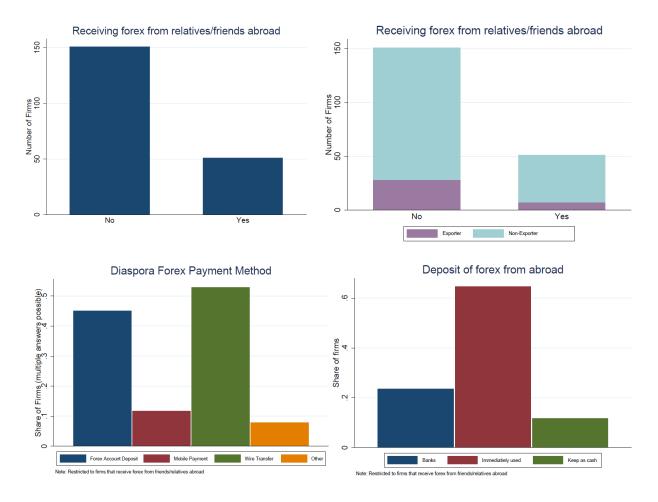
These responses can also be explored by firm type. Nearly all firms that reported accessing foreign exchange outside of the banking system were in the manufacturing sector. Nearly all were non-exporters as well. Taken together, the survey results suggest that non-exporting manufacturing firms have some of the most difficulty in accessing foreign exchange through the banking system.



Firms were also asked where they would turn for faster access to forex. [Ouestion] 36: Who would vou approach for faster access to forex?] Responses on this question paralleled those from Question 53. The most common response was banks, despite the many challenges discussed previously, but 21% of respondents said that they would go to the black market. On this question, even several exporters indicated that they would use the black market.

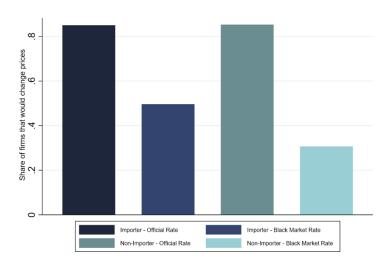


The survey revealed unclear patterns in use forex from family and friends abroad. When asked if firms receive foreign exchange from relatives or friends abroad, three-quarters of the respondents said no. [Question 38: Does the firm receive forex from relatives or friends abroad?] Yet, other portions of the survey indicate that diaspora/forex accounts are used by most importers. Among those firms who respond that they do receive forex from relatives or friends abroad, almost half of those firms indicate use of diaspora/forex accounts. [Question 39: How does the firm receive the forex (multiple choices possible)?] Slightly more respondents indicated that they utilize wire transfers and only a small share of respondents receive forex from relatives or friends abroad through mobile transfers. These results indicate that up to one-eighth of importers receive wire transfers from abroad in addition to diaspora/forex accounts or instead of using those accounts. Interestingly, more than 60% of the firms who report that they receive forex from relatives or friends abroad indicated that they use this resource immediately [Question: Where does the firm deposit them?], which suggests that these resources are often in urgent demand.



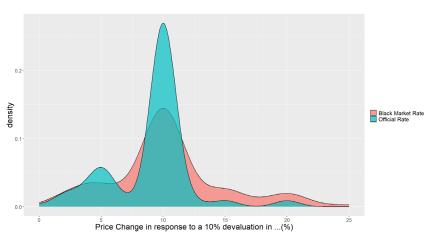
Exchange Rate Passthrough to Prices

In response to changes in the official exchange rate, most firms (85%) reported that they change their prices. [Question 60: If there is a change in the official exchange rate, do you change the sales price of your product(s) in Ethiopia?] Meanwhile, less than half of firms (43%) responded that they adjust prices when the black-market rate changes [Question 61: If there is a change in the black-market exchange rate, do you change the sales price of your product(s) in Ethiopia?]



The proportion of firms that responded that they change prices based on the official exchange rate was almost the same whether those firms imported over the last year or not. In contrast, a larger share of firms responded that they would change prices in response to a change in the black-market rate among those firms who imported versus those who did not.

Firms were then asked by how much they would change prices in response to a 10% devaluation in the exchange rate (for both the official and black-market rates). [Questions 60.1 & 61.1: If yes, how much would you change prices if the official/black-market rate devalues by 10%?]



The most common response to either a devaluation in the official rate or black-market rate of 10% was a price change of 10% — suggesting a 100% passthrough for many firms.⁵ Responses to the official exchange rate also clustered at a 5% change (50% passthrough), while firms that reported adjusting to the black-market rate had more responses above 10% (more than 100% passthrough).

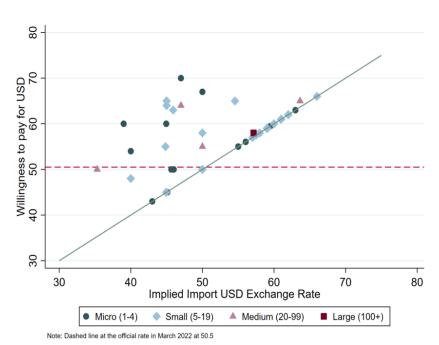
⁵ This is in line with a common perception in Ethiopia that high inflation is driven by the depreciating exchange rate. This is an intriguing finding, thought the overall perception does not stand up to closer scrutiny. See "Development in a Complex World: The Case of Ethiopia" – the Growth Lab's compendium of project research from its *Advancing Economic Diversification in Ethiopia* project.

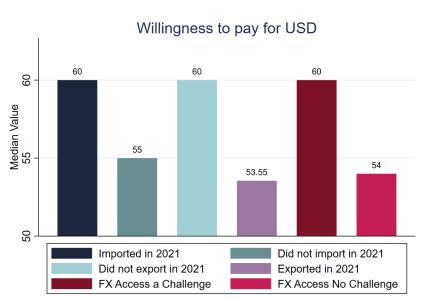
Willingness to Pay for Foreign Exchange

The survey asked firms for their maximum willingness to pay to access foreign currency in U.S. dollars. *[Question 57: If forex becomes even scarcer, what is the maximum rate the firm is willing to pay to access foreign currency?]* These responses covered a large range.

When comparing the implied exchange rate that firms reported paying (see Question 26), we can see that the maximum willingness to pay was much higher than what was paid for importers who paid low implicit rates. Meanwhile, those who paid higher rates (presumably using the black market) were closer to their self-reported maximum willingness to pay (on the 45-degree line). There were no clear patterns in these responses based on firm size.

There were differences in self-reported willingness to pay along other dimensions. The median willingness to pay was higher for firms that imported in the last year, firms that did not export, and firms that saw forex as a challenge. For each of group, the median of 60 Birr/USD was close to the top implicit rates paid based on the survey black-market and the exchange rate at the end of the fiscal year. For other groups, willingness to pay was still above the official rate.

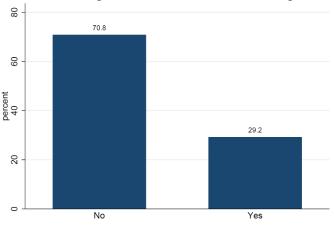




Note: The official exchange rate was 50.5 at the time

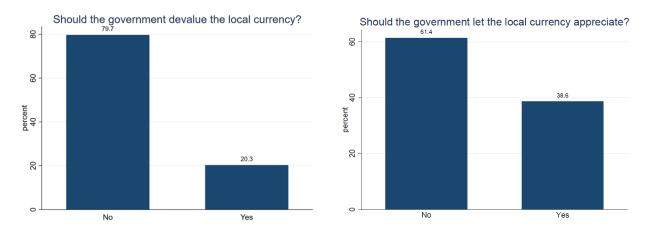
Policy Perceptions

In the last section of the survey, firms were asked a series of questions about policies and their expectations for the future. Most firms (70%) responded that government should not maintain the current exchange rate regime. [Question 63.C: Do you believe the government should do the following reforms: Maintain the current regime?] The responses of firms to alternative exchange rate regime options were informative, including in how they often ran against macroeconomic fundamentals.



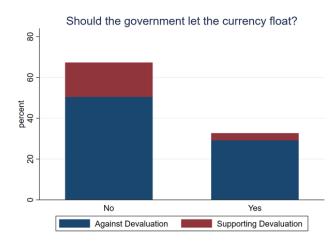
Should the government maintain the current regime?

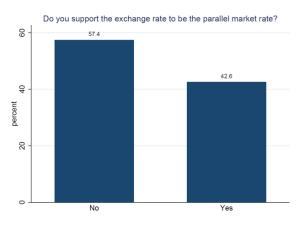
A large majority (80%) were against more rapid depreciation. [Question 63.A: Do you believe the government should do the following reforms: Devalue the Birr faster?] A smaller majority (61%) were against an appreciation of the exchange rate (a "revaluation" in local terminology). [Question 63.D: Do you believe the government should do the following reforms: Revalue the Birr?] This may imply that firms would have largely supported an option to devalue the birr at a slower rate, but this option was provided.



Two other policy options were provided. Firms were also against (67%) allowing the exchange rate to float or otherwise be market-determined. [Question 63.B: Do you believe the government should do the following reforms: Let the exchange rate to be determined in the market?] Though such a policy change would cause more rapid depreciation under current conditions of forex shortage, most of those respondents who did support this option were against more rapid devaluation. Finally, firms were also against — but by the smallest margin (57% against) across options — aligning the official and black-market rate. [Question 63.E: Would you support an

adjustment of the exchange rate where the official rate is set equal to the parallel market rate?] This question was intended to indicate an adjustment of the official rate (which is in policymakers' control) to align with the black-market rate (which is not). However, the question may have still been misunderstood by some respondents given the inconsistency with other responses.

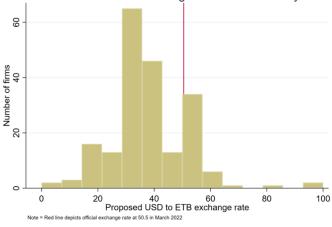


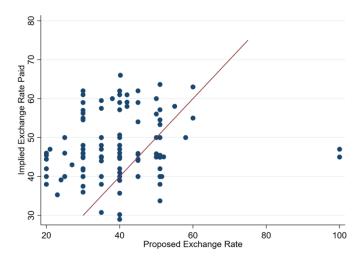


Firms were also asked what they felt the exchange rate should be at the time of the survey. [Question 62: What is the appropriate rate you believe the government should set the exchange rate at as of today?] Responses reflected a desire to see a stronger exchange rate — an appreciation versus the current rate. This was inconsistent with the above question on appreciation, where firms were largely opposed.

Responses to this question can also be compared to the implicit rate reported by firms for the last fiscal year (see Question 26). Most firms appear to have paid a rate that was above what they believe the official rate should be (i.e., firms above the provided 45-degree line on the graph to the right). A minority of firms thought the exchange rate should be much higher than what they paid — two firms saying much higher at 100 Birr/USD.

What should the exchange rate be set to today?





Overall, these policy questions show a pattern where most importers do not internalize the tradeoff between an overvalued exchange rate and difficulty in accessing foreign exchange. Importers would like access to foreign exchange at a lower price but a large majority face access to foreign exchange as a critical constraint causing significant losses in sales. Though firms largely reported opposition to more rapid devaluation of the official exchange rate they also indicated willingness to pay more Birr to access foreign currency, both in their actions in the previous fiscal year and in their self-reported willingness to pay.

When asked about their expectations for the next six months, exactly half of firms expected the rate of devaluation to accelerate, while approximately 30% expected slower devaluation, and 15% expected a continuation of the current trend. Only 5 firms expected an appreciation. *[Question 65: How do you expect the official exchange rate will change in the coming six months?]* Likewise, exactly half of firms expected the black-market rate to depreciate faster and a third of firms expected slower devaluation. The remainder of firms were split between expecting a continuation of the trend and responding that they didn't know. *[Question 66: How do you expect the black-market rate for forex will change in the coming six months?]*

IV. Key Findings & Lessons for Future Surveys

This survey was the first of its kind in Ethiopia and was conducted through a successful partnership between the Growth Lab and the Ethiopian Economics Association despite ongoing conflict in the country. The survey results provide a rich picture of firm-level behaviors and perceptions related to foreign exchange access. Results largely confirm anecdotal understandings while also identifying key differences in behaviors and the severity of the foreign exchange constraint for different types of firms. This report closes with a short list of key findings followed by a list of lessons learned for potential future surveys of this type in Ethiopia.

Key Findings

- The results provide further evidence that a shortage of foreign exchange and inefficient rationing are a critical constraint affecting the Ethiopian economy. The degree to which firms registered as importers reported being constrained by this problem in this survey and the losses reported are startling. With imports widely constrained, the economy will continue to face widespread problems in its access to needed inputs for production and investment.
- The constraint is most severe for certain types of firms. Firms that do not export, smaller size firms, manufacturing, and agriculture face constraint especially severely based on both their self-reported assessments and their actions to bypass formal systems of forex access.
- Firms rely on the banking system for formal access to foreign exchange yet face major delays. Key foreign exchange directives (creating diaspora accounts and exporter retention accounts) are important for some types of firms but disadvantage others by channeling scarce foreign exchange away from them. Firms that are in a critical position sometimes utilize the black market and other means outside of banks to access foreign exchange at a premium.
- Firms tend to import either all or none of their imports at the official rate, and import purchases on aggregate appear to occur roughly halfway in between the official and black-market rate. The survey is not able to precisely estimate the TWER, but the median firm paid implicit exchange rates that are halfway between the official and black-market rates.
- Firms tend to report a high willingness to pay for foreign exchange. This is seen both in the implicit exchange rates that were paid in the previous year to access imports and self-reported maximum willingness to pay. Yet, when asked about policy options, firms tend not to internalize the tradeoff between price of foreign exchange and access to foreign exchange
- Firms report a high tendency to passthrough prices when the official exchange rate changes. This finding may not be empirically backed but it captures an important perception at the

firm level. Firms more consciously connect the official exchange rate and price than the black-market exchange rate and prices.

• There is no easy and widely supported policy improvement on the exchange rate regime, but the survey does reveal a promising direction for consideration and further research. A policy that explicitly aims to align the official rate with the black-market rate through a unification path (either rapid or gradual) may have advantages in its clarity to stakeholders and, consequently, its ability to anchor inflation expectations.

Lessons Learned for Future Surveys

This survey was intended as a learning exercise that could inform future and recurring surveys of importers to assess policy effectiveness and inform policy decisions. The full survey or parts of the survey could be repeated toward this end. There are several questions that could be clarified or specified based on this first effort. One key improvement that frequent surveying would allow would be to ask firms to report on a shorter and more recent period of business activities — for example the last month or the last three months. This would overcome many challenges of precision that were faced in this survey, particularly in estimation of the TWER. At the close of the survey, respondents were asked if they would be willing participate in future surveys of this type and 91% of respondents indicated willingness to participate in similar surveys in the future. *[Question 69: Are you willing to participate in a follow-up survey to be conducted in 3-6 months?]*.

Specific lessons:

- Change period of analysis to improve precision regarding exchange rates: Due to the nature of asking for reflections over a year and the open-ended nature of some of the questions about the exchange rates used by firms, it was difficult to analyze the data in a comparable fashion. What worked well was capturing similar data across many questions to triangulate responses and identify internally inconsistent data; nonetheless, the data on effective and implied currency rates was too noisy to be conclusive. This could be improved by focusing on shorter periods of time within the survey.
- **Revisit survey section on policy perceptions:** The survey section on policy perceptions proved to be difficult to interpret because firms can have internally inconsistent views on their understanding of exchange rate dynamics. Questions on policy perceptions can still be informative, but wording of questions and response could be improved in future iterations. Firms could be asked to explicitly trade off price versus access in their responses.
- **Track survey respondents and attrition rates:** The survey of 202 firms does not include respondents who declined or who were unavailable to participate. This information is valuable because it provides insight on firms that are simply unavailable which is a natural

consequence of sample surveys — and firms that might choose not to participate for reasons concerning confidentiality, not wanting to reveal their perceptions, or other reasons that may themselves provide useful information.

- Update survey questions and response choices based on free-form input received: The pilot and full survey round helped identify ways in which importers self-report accessing foreign exchange. For instance, "own funds" were mentioned frequently but "the queue" was not. Firms understood the problem to be "foreign currency shortage" as opposed to an "inability to import inputs". Future surveys would benefit from revising response options to match the understanding of importing firms.
- Include additional questions about exports to understand the impact of imports: A key motivation of understanding imports in Ethiopia is to identify what is constraining access to imports needed for production and exports, which in turn affect the ability to import. Therefore, it would be worthwhile to include additional questions that connect the mechanisms through which exporting firms are able to access imports.
- Optimize data collection on sector- and industry-activities: The survey attempted to collect data on the types of economic activities or products that firms engage in. This did not work well in practice because it was cumbersome, and firms reported a mix of responses that were not internally consistent. In the future, the survey might benefit from a higher level of aggregation in the choice options offered to still collect meaningful data on the types of products imported and/or exported.

General lessons:

- Successful working relationship with local stakeholders: The Growth Lab invested significant resources in meeting potential survey institutions in the field and with a close working knowledge of the context. This was beneficial in ultimately shaping the survey to be contextually relevant and precisely targeted towards the nature of firms' operations. This included the Addis Ababa Chamber of Commerce Sectoral Associations (AACCSAs), international agencies and the Ethiopia Economics Association (EEA).
- Strong priors that informed survey design and sampling: Based on the diagnostic analyses that the Growth Lab conducted in the years prior to the survey, it was possible to develop a narrow and contextually relevant survey tool. This included a deep working knowledge of the foreign exchange regulations in Ethiopia as well as avenues through which businesses can access foreign exchange. This also made it possible to target firms in the country for a sample that was representative of differential access to forex.

• Accurate adaptation of survey for local context: It might be challenging for an individual firm to conceptualize several of the macroeconomic distortions related to the foreign exchange shortage. The language of economic analysis was not always suited for the language of everyday firm-level operations. The Growth Lab and EEA spent valuable time and effort in testing the survey tool to improve consistency and interpretability.

Appendix A – Survey Sampling & Questionnaire

A.1 – Sampling Frame

	Sample frame					
Sector/ Merchandise	Ethiopian		Foreigner		Both	
	No.	%	No.	%	No.	%
Clothes and office furniture related	7860	36.2	772	3.6	8,632	39.7
Supplies for health, education, agri.	4999	23.0	597	2.7	5,596	25.8
Vehicles, body & spare parts	4015	18.5	634	2.9	4,649	21.4
Different chemicals	1259	5.8	169	0.8	1,428	6.6
Others*	1223	5.6	205	0.9	1428	6.6
Total	19,356	89.1	2,377	10.9	21,733	100

Sectoral and citizenship-wise composition of importers

*Includes sectors such as agricultural products (fruits, vegetables...), log and wooden, petroleum and petroleum products

Sectoral and citizenship-wise distribution of sample

	Sample importers					
Sector/ Merchandise	Ethiopian		Foreigner		Both	
	No.	%	No.	%	No.	%
Clothes and office furniture related	72	36.0	7	3.5	79	39.7
Supplies for health, education, agri.	47	23.5	5	2.5	52	25.8
Vehicles, body & spare parts	37	18.5	6	3.0	43	21.4
Different chemicals	11	5.5	2	1.0	13	6.6
Others*	10	5.0	3	1.5	7	6.6
Total	177	88.5	23	11.5	200	100

A.2 – Survey Questionnaire

Section 1: Background Information

1.	Do you	u consent to participate in the survey (yes=1, no=0)?	
2.	Did the	e firm import in 2021 (yes=1, no=0)?	
2.1	. If no, v	when was the last year that the firm imported?	
3.	Name	of respondent (confidential):	
4.		ct address of the respondent: Subcity Woreda	
5.	Positio	on/Role of the respondent in the firm:	
6.	Name	of firm (confidential)	
7.	Gender	r of the top manager (male=0 or female=1):	
8.	Gender	r of owner of the firm (male=0 or female=1 or jointly owned=2):	
9.	Educat	tional level of the respondent (highest grade completed):	
10.	Length	n of professional tenure in current firm (years):	
Sec	ction 2:	Firm Characteristics	
11.	Year of	of establishment of the firm (year in GC)	
12.	Initial/	Starting capital of the firm (ETB)	
13.	Numbe	er of employees ⁶ working in the firm in the last fiscal year	
	a)	Total number of employees	
	b)	Number of permanent employees	
	c)	Number of temporary employees	
14.	Gender	r of employees	
	a)	Number of male employees	
	b)	Number of female employees	
15.	Legal s	status of the firm (circle one of the choices)	
	A.	Shareholding company	
	В.	Sole proprietorship	
	C.	Partnership	

⁶ Firm size is a composite measure of permanent and temporary workers. Firms are considered small, medium, or large if they have 5-19, 20-99, or 100+ workers.

- D. Limited partnership
- 16. Ownership stratus⁷ of the firm (circle one of the choices)
 - a) Domestic Investor
 - b) Foreign Investor
 - c) Joint Venture
- 17. Type of ownership of the firms (circle one of the choices)
 - A. Private
 - B. Public
 - C. Public-Private
 - D. Association
 - E. Other (specify)
- 18. Business sector in which the firm is operating (circle one of the choices)
 - a) Primary/Agriculture
 - b) Manufacturing
 - c) Service
- 19. At what capacity did the firm operate in the last FY 2020-2021 (estimated actual output as % of potential)? _____
- 20. If the firm operated below 100%, what were the main reasons? (check all that apply):
 - a) Formal COVID-19 lockdowns or other COVID-19 restrictions
 - b) Low demand because of COVID-19
 - c) Inability to import inputs to production
 - d) Constraints related to conflict
 - e) General labor shortages
 - f) Other (write in response)
- 21. If the firm operated below 100%, what was the most important (main) reason (from the above list or other) for operating below potential in FY 2020-2021?

Section 3: General Business Activities of the Firm

22. What is the main production activity or service provided by the firm? [Fill the response in the following table using the International Standard Industrial Classification (ISIC, revision 4) of All

⁷ A firm is considered to have foreign ownership if at least 10 percent of ownership is held by foreigners.

Economic Activities. Use the Annex 1 (Detailed structure of economic activities) for the codes and descriptions to be filled)].

Division of activity		Group code of activity	Class of activity		
Division code	Code description		Code	Class description	

23. What was the approximate annual sales value of the firm in the last fiscal year 2020-2021 (ETB)?

24. What is the approximate capital stock of the firm in the last fiscal year 2020-2021 (ETB)?

- 25. Which type of products has the firm imported within the last fiscal year (multiple choices possible)?
 - A. Raw materials
 - B. Semi-Finished goods
 - C. Fuel
 - D. Capital goods
 - E. Consumer goods
 - F. Other
- 26. What was the approximate total value of the import of these goods the firm imported over the last FY (2020-2021)? ETB ______ USD _____
- 27. What is the rough share of imports you obtained through the following payment modalities? (Note: totals should sum to 100%)

Payment Modality	Approximate share of imports
Retention earnings	
External loan	
Forex account	
Franco Valuta	
Other (specify)	

- 28. Does the firm engage in exporting (yes=1, no=0)?
- 29. Does the firm use any foreign exchange for non-importing purposes (yes=1, no=0)?
- 30. If yes for Question **29** above, how much forex did the firm use forex for non-importing purposes in the last FY (2020-2021) (USD)?

Section 4: Forex Transactions and Financial Services

- 31. Does the firm have accounts across multiple banks (yes=1, no=0)?
- 32. Which bank(s) does the firm have accounts with?
- 33. Does the firm currently have outstanding loans at any of these banks? (yes=1, no=0)?

34. If yes for Question **33**, how large are outstanding loans? (ETB)

- 35. Which one of the following licenses does the firm have (multiple choices possible)?
 - a) Letter of credit (L/C)?
 - b) Cash Against Document Financing (CAD financing)⁸?
 - c) Sales confirmation (SC)?
 - d) Other (specify)
- 36. Who would you approach for faster access to forex?
 - a) Banks C. Friend
 - b) Black-market D. Other (specify)
- 37. What is the primary source of finance for the firm (multiple choices possible)?
 - a) Own source C. Loan,
 - b) Aid/Gift D. Other (specify)_____
- 38. Does the firm receive forex from relatives or friends abroad (yes=1, no=0)?

39. If yes for Question **38** above, how does the firm receive the forex (multiple choices possible)?

- a) Forex account deposit C. Wire transfer
- b) Mobile payment D. Other (specify)

40. If yes for Question **38** above, where does the firm deposit them?

- a) Banks C. Keeps as cash
- b) Uses immediately D. Other (specify)
- 41. Does the firm face challenges in accessing loans in local currency (yes=1, no=0)?

⁸ Cash Against Document (CAD) Financing is a method in which an importer pays for goods before receiving them. To ensure the satisfaction of the transaction from both the parties, a third party will accept the shipping and title documents for the exported goods.

42. If yes to Question **41**, what are the top challenges (list up to three) of obtaining a loan (in ETB) from domestic banks?

1st.	 	 	
2nd.	 	 	
3rd.			

- 43. Does the firm face challenges in accessing forex or forex loans (yes=1, no=0)?
- 44. If yes for Question **43**, what are the top challenges (list up to three) you currently face in accessing forex?

1st.	 	 	
2nd.	 	 	
3rd.			

- 45. Did the firm face significant losses associated to the challenges in accessing forex in the last fiscal year (yes=1, no=0)
- 46. If yes for Question **45** above, how much loss is associated with challenges in accessing forex? Monetary value (ETB) ______; Proportion from total sales ____%
- 47. If the firm has accounts/licenses for importing activities, fill the information in the following table

Transactions/Regimes	Does the firm have this account/license (yes=1, no=0)?	Does the firm trade/arbitrage the use of this account for other importing firms? (yes=1, no=0)	Rate used to trade
Retention account			
Foreign exchange account (diaspora account)			
Franco Valuta license			

- 48. Did the firm submit a request to a bank for accessing forex in the last FY (2020-2021) (yes=1, no=0)?
- 49. If yes for Question 48 above, how long has this been pending?
- 50. If the forex request was granted for 2020-2021 FY, how long did it take to process? _____ days
- 51. Have you been in line for more than a year to access forex (yes=1, no=0)?_____
- 52. Did the firm purchase imports by using another firm's Franco Valuta license in the last FY (yes=1, no=0)?
- 53. Did the firm have to exchange currency outside of the banking system to access forex in the last FY? (yes=1, no=0) _____

- 54. If the answer to Question **53** is 'yes', from where?
- 55. What was unit of foreign currency that was exchanged?
 - a) USD C.EUR
 - b) GBP D. Other (specify):
- 56. What was the average rate of foreign currency (unit of currency from Q.55) from the source/s mentioned in Question 54 (currency to ETB)?
- 57. If forex becomes even scarcer, what is the maximum rate the firm is willing to pay to access foreign currency (units as per Q.53) today?
- 58. How much of the firm's imports was obtained through the official exchange rate in the last FY (2020-2021) (USD) _____
- 59. What proportion of imports was obtained at official rate as a share of total? _____%
- 60. If there is a change in the official exchange rate, do you change the sales price of your product(s) in Ethiopia?

60.1. If yes, how much would you change prices if the official rate devalues by 10%? (to be answered as a percentage)

61. If there is a change in the black-market exchange rate, do you change the sales price of your product(s) in Ethiopia?

61.1. If yes, how much would you change prices if the black-market rate devalues by 10%? (to be answered as a percentage)

Section 5: Policy Perceptions

- 62. What is the appropriate rate you believe the government should set the exchange rate at as of today (USD to ETB)? ______
- 63. Do you believe the government should do the following reforms (yes=1, no=0)?
 - A. Devalue the birr faster (yes=1, no=0)?
 - B. Let the exchange rate to be determined in the market (yes=1, no=0)?
 - C. Maintain the current regime (yes=1, no=0)?
 - D. Revalue the Birr (yes=1, no=0)?
 - E. Would you support an adjustment of the exchange rate where the official rate is set equal to the parallel market rate (yes=1, no=0)?
- 64. If you could suggest one policy change the government could enact to ease the forex constraint, what policy would you suggest?

- 65. How do you expect the official exchange rate will change in the coming six months (circle one of the choices)?
 - a) Accelerating rate of devaluation
 - b) Maintaining current pace of devaluation
 - c) Slowing rate of devaluation
 - d) Revaluation of the official exchange rate
 - e) Do not know
- 66. How do you expect the black-market rate for forex will change in the coming six months (circle one of the choices)?
 - a) Accelerating rate of devaluation
 - b) Maintaining current pace of devaluation
 - c) Slowing rate of devaluation
 - d) Revaluation of the black-market rate
 - e) Do not know

Section 6: Concluding Notes

- 67. Do you have additional information/questions corrections to responses (yes=1, no=0)?
- 68. If yes to Question 67 above, what is the information?

69. Are you willing to participate in a follow-up survey to be conducted in 3-6 months (yes=1, no=0)?

Appendix B – Forex Access Modalities & TWER

B.1 – Note on Forex Management in Ethiopia (Oct. 2020)

This note provides a brief description of the system of forex controls in Ethiopia, focusing on the key aspects of the system. The note traces the rationale and unintended consequences of a set of key directives that govern the allocation of forex across actors in the economy and identifies critical problems in the management of forex that can be addressed through policy decisions.

The inefficient rationing of forex forces firms to face lengthy wait times or compels them to seek forex on the black-market. The rationing of imports is done through a queue on a first come-first serve basis, not driven by information and price mechanisms, and fails to capture returns to additional forex. Ultimately, we find the "queue" at the heart of the current forex system stands at the end of another long queue of import requests that must be serviced before the formal queue begins. As the forex scarcity became chronic, incentives to utilize accounts that bypass the queue have risen sharply, including accounts for exporters, foreign investors, those in industrial zones, and diaspora. Firms that do not fall into those categories, or those that cannot import under *franco valuta* licenses, face severe constraints in accessing forex. The result has been a worsening of the forex constraint, despite policy changes that have loosened controls over time. Policy efforts that are aimed at reducing controls on the margins of the system face diminishing returns and add to the system's complexity, uncertainty, and may introduce new distortions.

The System of Forex Management (as of October 2020)

Ethiopia's forex regime is highly controlled and complex. In order to identify key problems and then propose targeted solutions, it is important to understand the rationale behind the directives that govern the system, grasp the broad timeline of their introduction and evolution, and understand their consequences, both intended and unintended. Foreign exchange has been strictly controlled for a long time in Ethiopia. The foundations of today's regime date back to the 1970s, when the Exchange Control Authority (ECA) of the NBE assumed control of all forex in the economy. As time passed, several key directives were layered onto the system to serve particular ends. Each of these key directives had an intended motivation, but eventually introduced unintended distortions that required further adjustments to the regime down the line.

One critical directive excludes firms from the administrative requirements of processing requests through the domestic commercial banking system, via *franco valuta* licenses. For import requests that do pass through the domestic commercial banking system, the first directive of note is the surrender requirement, which requires that each bank surrender 30% of their forex inflows to NBE. Of the 70% of forex that banks mediate, banks must unconditionally grant "on-demand" requests made by: export retention accounts, forex bureaus, diaspora FX accounts, foreign employees, "invisible payments", and external debt repayments. Anecdotally, some banks end up servicing 90% of their forex (after the 30% surrender) to on-demand requests, leaving only 10% for the queue. Within that allocation, at least half must serve priority requests. As a result, non-priority requests in the queue face rising expectations that they will never be granted. The most direct indicator of the increasing scarcity of forex is the number and volume of queue requests that go unfulfilled. A rising share of import needs never even make it to the queue, and if they do, they never make it through.

Surrender Requirement (Latest: FXD/54/2018)

Banks are required to surrender 30% of their forex inflows to the NBE every month. The purchase of forex by the NBE is done at the mid-rate rather than the buying rate. Of the 30% surrendered by banks now, almost 100% is used by the NBE for fuel imports.

Unintended Consequences: Surrender requirements effectively remove a portion of forex supply from the private economy in order to be allocated by the NBE for imports deemed a public priority. Banks are not able to freely allocate their full inflow of forex in the market. Banks are further instructed on the allocation of the remaining 70% they retain. This gives the private banking system very few degrees of freedom to service the non-public and non-priority sectors of the economy.

Queue Directive: (Latest: FXD/62/2019)

The queue system allows government to set rules governing forex allocation under conditions of unmet demand, without needing to actively mediate each dollar. While the current queue remains a legacy of the original established in 1992, the tightening of forex access since 2016 led to the issuance of a set of new, more targeted directives. Forex is only available for banks to distribute to the queue after banks comply with the 30% surrender requirement. In addition, banks must unconditionally grant "on-demand" requests made by: export retention accounts, forex bureaus, diaspora FX accounts, foreign employees, "invisible payments" (e.g., diplomatic missions, business dividends and profits), and external debt repayments. By being granted forex access ahead of even priority items in the queue, there are strong incentives to create accounts included under on-demand requests.

Within the queue, banks are required to issue forex between a tiered "priority" list and a "nonpriority" list. The "priority" list includes: fuel, pharmaceutical products, agricultural and manufacturing inputs, baby food, and education materials. Priority imports must be granted to 50% of the banks' remaining forex (after the 30% surrender and after meeting on-demand requests). Banks allocate remaining non-queue import requests on a first-come, first-serve basis and are prohibited from outright rejecting import requests. For their part, importers are prohibited from submitting requests at more than one bank and are capped at two outstanding forex requests or face blacklisting and fines. Requests stay in the queue indefinitely. The Governor and Vice Governor of the NBE have executive power to provide special approval to applicants on a caseby-case basis.

Unintended Consequences: The design of the queue aims to increase the fairness, predictability, and efficiency of forex allocation, while also guaranteeing forex for essential goods for the economy. In practice, limited data on forex allocation from the queue suggests that the system falls short of each goal of fairness, predictability, and efficiency. As the forex shortages become chronic and the wait times for non-priority items in the queue extend seemingly without end, importers describe pursuing workarounds to bypass the queue (often multiple approaches simultaneously), including: using the black-market to access imports, finding ways to access *franco valuta* licenses, export retention accounts and diaspora FX accounts. These distortionary behaviors lead to a vicious cycle of inefficient allocation, longer wait times for everyone, and uncertainty for businesses and individuals. Even priority items, including medicines, face wait times in accessing forex, as a signal that not enough forex is making it to the queue. NBE discretion to allow requests

to jump the queue further contributes to a sense of a preferential regime. Moreover, much of the rationing happens outside of the queue, and is heavily directed to favor exporters, diaspora, businesses in industrial parks, and SOEs. Domestic firms, particularly SMEs, face uncertain, unpredictable access to forex, if accessed at all, in the climate of the current queue and forex shortage. In this environment, many import-dependent firms that must resort to the queue have shut down operations, hampering broad-based growth in Ethiopia.

Franco Valuta Licensing (Latest: Regulation 66/2013)

_____ Franco valuta is the permission to import goods on which no forex is payable through the domestic banking system. After obtaining several NBE and Ministry of Industry licenses, foreign-owned businesses held by non-resident Ethiopians can import, duty-free, items that are associated with production, manufacturing, and priority sectors (without the need for a Letter of Credit, Cash Against Document or Telegraphic Transfer). The original objective recognized that foreign businesses needed an avenue to access forex for urgent and priority imports, e.g., spare parts for machinery, medical and food supplies. In practice, though, *franco valuta* is a privilege granted to a wider range of businesses and import purposes. Instituted in 1977, with major updates in 1996, 2003, and 2013, goods imported on a franco valuta basis are imported duty-free. The list of permissible imports has broadened over the years to include: goods used for any manufacturing activity, including all capital goods, production inputs, any machinery accessories, household goods imported for non-resident Ethiopians, among others. The total share of imports processed through *franco valuta* licenses has risen by 10 percentage points of all imports since 2015, from an average of 20 percent of all imports in the three years leading up to 2015 to above 30 percent over the most recent three-year period.

Unintended Consequences: As a fast pass-through import administration, *franco valuta* offers a privileged bypass to the forex queue. Foreign shareholders of domestic companies can make direct payments for domestic business imports. Furthermore, by tying import duty exemptions to these licenses, the GOE loses out on customs duty revenues. The mechanism incentivizes firms to pursue a license to bypass the forex constraint. It is difficult to trace if *franco valuta* licenses have eased the forex shortage of export-generating businesses or if they have widened a secondary market for imports.

Exporter Retention Account (Latest: FXD/66/2020)

Eligible exporters are permitted to retain 30% of their earnings indefinitely (Account A) and are given 28 days to utilize the remaining 70% (Account B), after which they must surrender it to the NBE via local banks. The motivation is to incentivize exporters, to ensure those firms that generate forex for the economy can access imported inputs necessary to expand exports that in turn earn additional forex. The 30/70 retention represents a significant loosening from previous directives.

Unintended Consequences: Despite good intentions, firms are gaming the system. Some firms sell their import access for activities unrelated to exports that may fund non-productive or non-priority imports. Firms who do not need all of their export earnings or cannot use them in the retention period (or simply profit more from selling access to them than using them to buy inputs) sell their access in a parallel market, driving up the black-market premium and adding to the forex shortage in the official market. For example, some coffee exporters sell their coffee below the

world price, willingly taking that loss in order to access scarce forex to sell through the blackmarket for a profit. A growing signal of attempts to use these accounts to bypass the forex constraint is the rapid rise in export license applications. As waiting times in the queue have extended significantly, firms have sought to bypass the queue, with the exporter retention account presenting, at least anecdotally, a primary workaround.

Diaspora FX Account (Latest: FXD/55/2018)

Context: To incentivize non-resident Ethiopians in the diaspora to invest in Ethiopia, in 2004 the NBE formally established a special bank account. Known as the FX Account, it allows commercial banks to open foreign currency accounts for the diaspora, but also extends to foreign-owned businesses, businesses based in industrial zones, and remittance service providers. FX accounts can be used to finance imports, but the account holder must furnish a business license related to these imports.

Unintended Consequences: By having non-residents as shareholders or otherwise connected to the business, firms can utilize FX accounts to import. This itself is not a problem if it engages the diaspora through increased remittance or forex inflows. In practice, firms are able to pay black-market rates to access dollars that are then funneled through FX accounts to import. FX account holders can similarly charge a fee to traders who otherwise lack access to FX accounts in order to open a letter of credit and mediate access to imports for the business.

Key Issues that need to be Addressed in the System

The directives described have led to distortions in the efficient allocation of forex in Ethiopia. Understanding how the controls intensify macroeconomic imbalances and vulnerabilities is key to developing a targeted policy approach. Moving towards a market-clearing exchange rate system will eventually render the queue unnecessary, because the market price of forex will adjust to the demand and supply pressures. Changes in the surrender directive may be necessary to revise and update as the scarcity of forex changes and as import demand shifts. Supporting exporters and the diaspora will remain important features of a market-clearing system, but the conditions around these forex accounts should be reviewed to eliminate the basis for manipulating the system. Ultimately, reforms to the controls would reduce the loopholes that actors use to bypass the constraint of forex shortages.

To address the binding constraint, Ethiopia must expand forex inflows. In alignment with the new IMF program, the Government of Ethiopia aims to transition to a "market-clearing" system of foreign exchange in the next three years. The Homegrown Economic Reform Program recognizes that two sets of responses are needed to the binding forex constraint: (1) generating an increase in the supply of forex, which requires coordinated actions across public sector entities and can be supported in the short-term by the international community, and (2) improving the effectiveness of the mediation and management of scarce forex, which is primarily a policy challenge that falls under the purview of the NBE. The two approaches complement one another.

B.2 – Transaction-Weighted Exchange Rate (TWER)

Importers can access the goods they need through different mechanisms, outlined in the directives above. This is determined not only by the type of import they wish to purchase, but also factors such as their export-generating capacity, affiliation with the diaspora community, or special license granted based on a determination of priority-access to FX. Ultimately, the effective transaction rate at which importers interact in the market is not necessarily the official exchange rate; many importers find ways to bypass the lengthy wait times and heavily constrained FX market.

Anecdotal evidence on the prevalence and ease of overcoming the constraints is useful in estimating what share of the total import bill occurs at the official rate vs. the parallel rate, based on an understanding of who can access FX through which channels, and what the distortions and incentives to bypass the official market are. A more robust method would quantify this using data collected from importers on how they access FX or administrative data on import transactions through the formal banking system. In the absence of complete data on either angle, we apply a qualitative understanding of the FX control regime to estimate this 'Transaction-Weighted Exchange Rate' (TWER) to understand the extent to which the parallel market is being utilized, as well as to suggest caveats to the inflationary impact of an official nominal depreciation.

The TWER can help to answer questions such as: (1) What share of transactions occur at the official versus the shadow rate? (2) What is the effective tax on exports? (3) How significant are bottlenecks faced by importers? Overall, quantifying the TWER helps to provide a more nuanced understanding of the supply and demand dynamics of the shadow forex market. The TWER varies heavily by sector and by firm size and type. Therefore, there is value in understanding the economy wide TWER, but even more so in observing the differential estimates.

We leverage two methods to estimate the TWER and corroborate these against each other. Quantifying how much the public sector (including state-owned enterprises) imports is the starting points for both methods. The public sector is assumed to import at the official rate, and the private sector is where we apply assumptions on the effective exchange rate used. Both methods use FY 2017-2018 data, wherein the total import bill (goods imports + service imports + franco valuta imports) is \$24 billion.

Method 1: Assuming extreme distortions with the FX controls yields a TWER that is approximately halfway between the official and parallel rates. Here, all Franco Valuta imports are assumed to be transacted at the parallel rate (because these licenses and privileges can be arbitraged to access imports by those who can pay the price); all fuel imports and non-fuel public imports occur at the official rate; all private sector imports except those in the queue occur at the parallel rate (because exporter retention accounts and diaspora accounts can be arbitraged); transactions through the queue (recent data estimates for the transaction volume of the queue is roughly 4-5% of the total import bill) occur at the official rate; and service imports all occur at the official rate.

In sum, 44% of the transaction value of imports is estimated to occur at the official rate (while 56% occurs at the shadow rate). Using the average FY 2017-18 official and parallel exchange rate -26.3 birr/\$ and 31.8 birr/\$ respectively – this is an effective rate of 29.4, which represents a 12% spread with the official rate (as opposed to a 21% spread between the official and parallel rate).

Method 2: Assuming more moderate distortions and focusing on end-use of private sector goods imports yields a TWER that is also approximately halfway between the official and parallel rates. Here, all Franco Valuta imports are transacted at the parallel rate (because these licenses and privileges can be arbitraged to access imports by those who can pay the price); all public-sector capital and consumer and fuel imports occur at the official rate; private sector imports are split into capital, consumer, and semi-finished goods, imported through both the official and parallel rates based on anecdotal understanding of the extent of the distortions; and service imports all occur at the official rate as well.

In sum, 61% of the transaction volume of imports is estimated to occur at the official rate (while 39% occurs at the shadow rate). Using the average FY 2017-18 official and parallel exchange rate -26.3 birr/\$ and 31.8 birr/\$ respectively – this yields an effective rate of 28.4, which is an 8% spread with the official rate (as opposed to a 21% spread between the official and parallel rate).

	Year	FY 2017/18	FY 2018/19	Calendar 2019
	Average Official Rate	26.3	28.1	29.1
	Average Parallel Rate	31.8	35.6	39.4
	Spread	21%	27%	36%
	% of transaction value at official rate	44%	44%	44%
Method 1 (FX controls)	Transaction-weighted nominal rate	29.4	32.3	34.9
	Implied Spread	12%	15%	20%
	% of transaction value at official rate	61%	61%	61%
Method 2 (end-use composition)	Transaction-weighted nominal rate	28.4	31.0	33.1
1 /	Implied Spread	8%	11%	14%

As more transactions are effectively done at the shadow FX rate, more economic agents internalize the market price into their decision making, more of them face transactions costs that are uneven and distortionary, and the smaller the inflationary impact of a devaluation may be (since much of the transaction volume occurs at the parallel rate). Implications for policy depend on a close understanding of the different exchange rates that exporters and importers ultimately face.