

# Improving Access to Financial Services for Refugees in Western Europe

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### Acronyms

AML-CTF	Anti-Money Laundering/Counter Terrorism Financing
AZR	Central Registry of Foreigners
BAMF	Federal Office for Migration and Refugees
EU	European Union
FI	Financial Institution
GDP	Gross Domestic Product
MFI	Microfinance Institution
OECD	Organization for Economic Cooperation and Development
кус	Know-Your-Customer
ODA	Official Development Assistance
P2P	Peer-to-Peer
PPP	Public-Private Partnership
UNHCR	United Nations High Commissioner for Refugees

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#### **Executive Summary**

Since the start of the refugee crisis in 2014, millions of refugees have entered Europe. In Germany alone, over one million Syrian, Iraqi, and Afghani refugees have requested asylum (UNHCR, 2017). By 2017, Germany had accepted 800,000 of those applications (Romei, 2017). This dramatic increase in population has placed a burden on governments throughout Europe, straining economic, social, and political systems. Public and private-sector entities have engaged in innovative policymaking and entrepreneurship in order to alleviate this burden and improve the situation of asylum seekers. However, many refugees continue to live in refugee centers, rely on government support, and operate outside of the formal economy.

In this report, I will examine four options to improve the financial inclusion of refugees, which is critical to the economic and social integration of this population. I will focus my analysis on Germany, where estimates suggest that over 50% of refugees do not have access to a bank account (Santos, 2016). In other words, over 500,000 individuals cannot access basic financial services, including checking, savings, and credit. As a result, many are unable to find long-term employment, rent homes, or make general economic progress in their new country of residence (Shotter, 2016). Instead, they continue to rely on the support of government and nongovernmental institutions.

Experts suggest that there are both demand- and supply-side interventions that can improve financial inclusion. Demand-side interventions include those activities that encourage refugees to seek out financial services, such as language or financial literacy training. Supply-side interventions address the gap between existing products and services and the needs of refugee populations, such as acceptance of alternative forms of identification.

This study looks at four alternatives for improving the financial inclusion of refugees in Germany:

- 1. Let present trends continue
- 2. Expand Central Registry of Foreigners (AZR) to meet needs of and share with FIs
- 3. Incorporate financial literacy training into existing integration program
- 4. Partner with N26 and subsidize digital bank accounts for all refugees

I evaluate these alternatives according to their cost-effectiveness, political feasibility, and operational feasibility. To evaluate effectiveness, I consider the supply-side versus demand-side nature of each option, as well as the number of refugees affected.

Ultimately, I recommend that the German government partner with N26, a digital banking startup, to subsidize accounts for all refugees. This intervention is the most effective, as it is a supply-side solution that closes the existing gap between products offered and refugee needs. This intervention has the potential to bring all refugees with access to a 3G mobile phone into the formal financial system, without engaging traditional financial institutions. In implementing this alternative, the government would need to create a public-private partnership and consider how to evenly distribute benefits, costs, and responsibilities between all partners.

### Problem: Financial Inclusion Refugees in the EU

Civil war broke out in Syria in 2011, displacing almost five million people (UNHCR, 2017). Since then, millions of displaced persons have traveled through Turkey, Greece and Italy to seek asylum in the EU, prompting the European Refugee Crisis. This massive influx of refugees has overwhelmed European governments, public and private sector institutions, and local populations. Countries have been slow to implement programs to integrate refugees, resulting in civil unrest, growing nationalism, and confusion (Council on Foreign Relations, 2016).

Germany has seen the greatest increase in number of asylum seekers since displacement began. In 2016, Germany received 60% of all asylum application requests in the EU, amounting to 722,000 unique requests (Eurostat, 2017). In other words, the country received over 8,789 requests per million German citizens, a 63% increase over 2015.

Refugees and communities stand to benefit from financial inclusion, yet 50% of the 1.2 million refugees residing in Germany today do not have access to financial services provided by formal financial institutions (FIs) (Santos, 2016; UNHCR, 2017).¹ One of the most critical aspects of successful integration of asylum seekers in destination countries is financial inclusion. At its most basic level, financial inclusion grants refugees access to bank services, including savings, credit, and mobile money. When refugees have the ability to store earnings and cash benefits from relief organizations, they benefit from the safety that FIs provide. Financial inclusion has broader implications as well, enabling greater economic mobility, preservation of dignity, and improvements to the macroeconomy.

Most governments, NGOs, and private sector actors agree that there are supply-side and demand-side interventions that could improve financial inclusion of these communities. These include private sector initiatives, such as developing new products and services that maintain security but also promote ease-of-use for new, financially illiterate customers, as well as market-building tactics, such as creating programs and services that remove language and other barriers.

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<sup>&</sup>lt;sup>1</sup> Note: In this report, financial services include those available through commercial banks, such as loans, checking accounts, savings accounts, debit cards, credit cards, deposit services, and credit card processing.

#### Financial Inclusion: Current State, Barriers, and Potential Solutions

#### **Financial Inclusion in Germany**

Germany is a critical destination point for refugees in Western Europe. The country has been willing to innovate with policy in order to improve integration of refugees and, as a result, is one of the more financially inclusive countries in the European Union (EU). Korynski and Pytkowoska (2015) developed a Financial Inclusion Score (FIS) that ranks countries in the European Union

(EU) based on residents' access to formal financial institutions and services that include: bank accounts, credit, deposits, and insurance. To determine the FIS of each country, Korynski and Pytkowoska measured the demand for financial services by the population, supply and quality of financial services products, existing financial services infrastructure, and policy support. According to FIS method. Germany ranked 8<sup>th</sup> in Western Europe.

Category	Country	Rank	FIS Score
Leaders	Sweden	1	1,000
	Denmark	2	1,000
	Finland	3	1,000
	Ireland	4	1,000
	France	5	1,000
	Cyprus	6	1,000
	Slovenia	7	1,000
	Germany	8	1,000
	Latvia	9	1,000
	Spain	10	1,000
	Netherlands	11	1,000
		1	1

Table 1. FIS Rankings - Leaders in Financial Inclusion. Source: Korynski & Pytkowska (2015).

However, the FIS method does not capture the current situation perfectly because it ranks countries on a relative basis. Although the method for scoring each country is sound, FIS considers the best performer in each category as the baseline for comparison. For example, if Sweden has the best financial services infrastructure relative to its peers, FIS ranks Germany's infrastructure against it, rather than against a fully inclusive alternative. Therefore, although Germany has a high FIS, it may simply reflect that better alternatives do not exist.

Although several European Union countries require that FIs serve refugees and asylum seekers, most do not have the systems in place to do so. Batsaikhan et al. (2017) surveyed FIs in Western Europe and found that 50% indicate that they already provide substantial services to refugees. Yet there are still significant hurdles to onboarding. For example, many countries provide no national regulatory guidelines or enforcement mechanisms for FIs on the financial inclusion of refugees. Germany does have national guidelines, however, the low percentage of financially included refugees in the country suggests that there is no proper enforcement of these existing regulations.

#### **Demand for Financial Services from Refugees**

*Institutional Barriers* There are many demand-driven explanations for financial exclusion's persistence throughout Europe. Through interviews with over 150,000 randomly-selected adults

around the world, Demirguc-Kunt, Klapper, Singer, and Ouedheusen (2015) found that insufficient funds, lack of necessary documents, lack of trust in institutions and digitization, and distance from FIs are significant barriers to financial inclusion. Although the study did not focus on refugees specifically, these factors are likely more persistent and limiting for migratory populations. In a summary of internal research on financial inclusion, the OECD (2016) also identified language skills and financial literacy as a recurring challenge to onboarding to migrants and refugees.

Variable & Changing Needs A refugee's stage within his or her journey, from arrival to short-term displacement, to permanent settlement, significantly determines demand for services. Krsytali and Wilson (February 2017) (September 2017) interviewed and observed 120 refugees in camps in Greece, Jordan, Turkey, and Denmark about their financial experience throughout their journey. They found that there are three stages common to each refugee's journey as an asylum seeker, including arrival, short-term displacement, and permanent settlement, and that needs vary greatly depending upon the stage. De Matteis (2015) supports these findings with a survey of research on the financial experience of refugees in Italy. Both de Matteis and Wilson and Krystali's findings suggest that solutions must be dynamic and reflective of the transitory nature of migration. For example, a product that delivers cash immediately to meet survival needs in a transit country may not be appropriate for longer-term settlement in a destination country. On the other hand, products targeted at refugees in Germany, a destination country, must be fully integrated into the larger financial system.

**Familiarity with Banking System** Wilson and Krystali (February 2017) also found that familiarity with the formal banking system prior to seeking asylum drives demand for services. Many refugees were unbanked before leaving their home country and were, therefore, more likely to distrust both formal and digital solutions. However, these individuals placed significant trust in kinship networks and hawalas, kiosks that act as money operators throughout North Africa and the Middle East. Wilson and Krystali's research showed that, although there might be limited demand for formal financial services, refugees were familiar with the concept of banking and had experience with informal institutions. Leveraging the experience of refugees presents a significant opportunity to approach financial inclusion with less formal and more dynamic solutions.

#### **Current Supply of Financial Services for Refugees**

**Static, Inappropriate Products** Evidence suggests that, although the European Union requires that its member-states supply products to refugees, a gap persists between product type and customer needs. Batsaikhan, et al. (2017) solicited responses from FIs across Europe to determine the quantity and quality of these services. This survey highlighted one of the

significant hurdles to inclusion: even when products are available, refugees are likely unaware of their existence. Of the 14 FIs that responded, seven indicated that they already provide substantial services to this specific target group. At the same time, 100% of FIs surveyed who do not currently have refugee clients had not taken any steps to actively market to refugees. Among banks with refugee accountholders, more than half had not actively attempted to attract refugees as clients. This lack of proactive engagement has likely forced refugees to seek out services on their own, wasting valuable time they could otherwise spend looking for employment, healthcare, or educational opportunities. Language barriers further complicate this effort.

**Prohibitive Regulations** Existing regulations also present challenges. The EU has strict Anti-Money-Laundering/Combating the Financing of Terrorism (AML/CFT) policies in place. While policymakers intend to protect EU citizens through implementation of these codes, they are extremely damaging to refugee efforts to join the formal economy. In a review of financial inclusion policies in developing countries, the Financial Action Task Force (2011) (FATF) noted that the process that resulted from AML/CFT regulation, such as customer due diligence, record-keeping requirements, reporting of suspicious transactions, and internal controls, discriminated against refugees. In fact, the policy did not achieve its stated objectives, but inadvertently increased the likelihood that criminals would move their business to underground markets (FATF, 2011). The FATF's research suggests current policies exacerbate the vulnerability of refugees and likelihood these populations will continue to operate in the informal economy.

**Reputational Risk & Misconceptions** Many FIs believe serving vulnerable populations puts their reputation at risk. The UNHCR (2016) summarizes the result of several studies that showed that FIs' ignorance of the refugee population was a significant hurdle to inclusion. In a survey of FIs around the globe, the FATF (2011) found that FIs consider refugees to be high-risk clients, believing that refugees did not earn a regular income, conducted frequent micro-transactions, and relied on aid. These beliefs may dissuade FIs from developing products that target the unique needs of the refugee market.

Betts, Bloom and Kaplan (2014) have found that, contrary to the beliefs expressed, refugees are skilled and independent. In fact, in a survey of over 1,500 refugees living in urban and rural areas of Uganda, over 75% of respondents in urban areas did not rely any form of aid and more than 80% held consistent employment (Betts, Bloom, & Kaplan, 2014). This research suggests refugees present a new, untapped market opportunity rather than a great challenge. Although the population in Uganda is significantly different from refugees in Germany, the general needs of refugees are consistent.

**Need for Scale** Refugees in Germany have unique needs, such as language support, that make cost per acquisition of a refugee client higher than traditional FI customers. Bold and Porteous

(2012) highlighted the potential costs of developing products to serve similar customers that fall into this niche category. In a study of financial inclusion efforts across Mexico, South Africa, Brazil, and Columbia, the authors interviewed policymakers, cash transfer recipients, and Fls to gauge the experience of each stakeholder. The authors found revenues exceeded costs for the majority of Fls, but only if the Fl had a large customer base. This research demonstrates that Fls require large refugee markets to ensure a worthwhile return on investment. However, the distribution of refugees throughout Western Europe make it difficult for Fls to reach sufficient economies of scale. Therefore, government entities may need to provide subsidies to incentivize investment in product development for this niche market.

#### **Reducing Barriers Through Supply- and Demand-Side Solutions**

Policymakers and NGOs have addressed demand-side barriers to financial inclusion by developing policies and programs directed at refugees, such as financial literacy education programs. For example, the United Kingdom's Money Advice Service is a government initiative that provides financial support and training to low income citizens and migrants (Atkinson and Messy, 2015). However, according to the OECD (2016), the policy has not satisfactorily addressed financial education and access.

To date, providers have missed opportunities to tap into refugee markets because they misunderstand the ways in which refugees use financial services. Existing resources may provide the skeleton for programs that could successfully attract refugees. Lewis et al. (2017) suggest setting measurable goals, leveraging data, and working with policymakers to establish a regulatory environment that supports these efforts. This study suggests advances in data and technology may enable new ways to develop targeted products. It also establishes that public-private partnerships are critical to addressing current challenges (Lewis et al., 2017). In a survey of 14 countries in the European Union, the European Commission (2008) found that partnerships with informal institutions, such as moneylenders, pawnbrokers, and microfinance institutions (MFIs) supported broad financial inclusion. These alternatives are akin to hawalas, making them attractive, refugee-centric solutions.

In fact, studies show that the most effective policy efforts take the form of public-private partnerships, using economic incentives to drive market-based solutions. Demirguc-Kunt et al. (2015) found that many positive advances in financial inclusion are the result of government-enabled, flexible supply-side dynamics, such as low fees, local branches, flexible identification requirements, and distribution of benefits through bank accounts. The research implies that that FIs have the systems in place to support refugees but require regulatory support to adapt existing products to the refugee market.

#### **Developing Efficient Public-Private Partnerships**

The efficacy of public-private partnerships (PPP) is subject to debate. Hall (2015) conducted a study of PPPs around the world, comparing the cost-effectiveness and efficiency of PPPs against public-sector projects alone. Hall found that PPPs were significantly costlier and less effective in solving constituent problems than those funded through public spending alone. Although his critique of failed PPPs is valid, his analysis relies heavily on qualitative data, rather than quantitative research methods (Hall, 2015).

Other studies provide evidence that PPPs are more effective than public spending, especially for those projects that require large upfront capital costs and industry expertise. Gathering data on PPPs in the United Kingdom and United States, Moszoro (2010) found that PPPs could be Pareto-efficient and achieve enough cost savings to merit consideration but required that the public and private partners share governance and investment. His conclusions were especially true in stable economies with access to cheap capital.

Researchers at Syracuse University (2016) further supported the benefits of PPPs for meeting schedule and cost requirements more efficiently than public sector alternatives (Brown et. al., 2016). Through interviews with key stakeholders in PPPs in the United States, the researchers found that "political commitment... complete value-for-cost analysis, supportive local and state legislation, [and] accurate assumption of interest rates" were factors critical to the success of PPPs. These findings suggest that it would benefit the German government to enter into a PPP if it chooses to approach a supply-side intervention in the financial services industry, as the high costs of research and development, retaining human capital, and product and service delivery are prohibitive to easy entry.

#### Interventions in in the German Context

It is important to note while Germany has been especially open to refugees, there are competing political interests in the country that threaten the passage of any policies intending to help this population. In 2017, for example, Germany's Alternative for Germany (AfD) party gained a significant number of seats in parliamentary elections, reflecting growing anti-migrant sentiment, particularly in rural parts of the country (Reuters, 2017). Should the AfD continue to gain ground and create a rival coalition to the conservative majority, the government may block or redact policies intended to integrate refugees in favor of those that limit the movement of asylum seekers within the country's borders. Additionally, this phenomenon has persisted across Western Europe, suggesting that countries hoping to pass progressive legislation towards migrants and refugees must be wary of the fragile political environment and potential political and social backlash.

#### **Stakeholders**

#### **Asylum Seekers (Refugees)**

Asylum seekers are the primary consideration of this report. Since 2014, over one million Syrian refugees have entered Germany seeking asylum. Germany has granted asylum to at least 800,000 of these applicants, 65% of which are adults (Romei et al., 2017). Estimates suggest that over half of these refugees do not have access to a bank account (Santos, 2016). The German government spends around \$25,000 per refugee per year, or about \$20 billion in total (Romei et al., 2017). Welfare spending is especially high for the 500,000 refugees who live in asylum centers – a cost increased financial inclusion would help to reduce.

#### **Financial Institutions (FIs)**

For the purpose of this study, financial institutions (FIs) refers to commercial banks that conduct traditional banking services, including checking and savings, for retail customers. Germany has a three-pillar banking system consisting of savings banks (Sparkassen), co-operative banks, and private FIs. Savings banks comprise 50% of all transactions within the country, while Deutsche Bank and Commerzbank, the largest of the private FIs, conduct 30% of all transactions (U.S. International Trade Association, 2017).

#### **German Government**

The German government is a critical stakeholder in the question of financial inclusion of refugees. The OECD suggests government spending per person in Germany is less than \$21,000, yet the country spends almost \$25,000 per refugee (OECD, 2018) (Romei, 2017). This spending is not only a political liability for government officials, but also an indicator of the economic welfare of the refugee population. Thus far, German political leaders have been open to accepting Syrian refugees into the country. It is in the government's continued interest to implement measures that improve integration and reduce the cost of hosting refugees.

#### The Federal Office for Migrants and Refugees (BAMF)

The Federal Office for Migrants and Refugees (BAMF) manages refugee intake, data collection, and oversight within Germany (Federal Office for Migrants and Refugees, 2018). BAMF reviews all asylum applications and makes final decisions on who will receive asylum. BAMF is also responsible for the dissemination of information to refugees and the coordination of integration programs. Because BAMF is so integral to each aspect of a refugee's time in Germany, the office is an important partner in all alternatives.

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<sup>&</sup>lt;sup>2</sup> 2015 estimate adjusted for inflation

#### **Evaluative Criteria**

This study will consider five criteria in assessing the alternatives:

- 1. Cost
- 2. Effectiveness
  - a. Number of refugees affected
  - b. Immediacy of financial inclusion
- 3. Cost-Effectiveness
- 4. Political Feasibility
- 5. Operational Feasibility

#### **Key Assumptions:**

There are several underlying assumptions to the analysis of each alternative in this study (Romei, 2017) (OECD, 2018):

- There are at least 800,000 legal refugees in Germany that are in the existing database and have access to government services.
- 65% of all refugees in Germany are adults. 35% are children.
- Over half (480,000) of accepted asylum seekers live in refugee centers. Those that do not live in refugee centers live in apartments or homes throughout Germany.
- The inflation rate in Germany is consistent at ~1.38%.

See Appendix One for a full list of assumptions.

#### 1. Cost

Cost will measure the financial investment associated with each proposed alternative, using relative costs appropriate for each indicator. A full list of cost estimates is available in Appendix One.

#### 2. Effectiveness

Effectiveness = Number of Refugees Affected \* Immediacy of Financial Inclusion

In order to measure the effectiveness of each alternative, I will consider two factors: the number of refugees the intervention affects and the immediacy of financial inclusion. Both are important factors in considering the impact of each alternative. Currently, there are 800,000 accepted asylum applicants in Germany. Of these, 520,000 (65%) are adults of working age, representing the maximum number of people each solution might impact.

For the purposes of this report, I consider the immediacy of financial inclusion to be a function of the demand-side or supply-side nature of the intervention. If an alternative is a demand-side intervention, it *indirectly* achieves the desired outcome by informing the market of what is available (also called "preparing the market"). It does not, however, alter existing conditions so that the financial services environment is better able to meet the needs of refugees. A supply-side alternative, on the other hand, has a more *direct* effect because it implies a transformation to existing products and services for the specific purpose of including refugees. This is the most desirable outcome because it does not increase the effort required on the part of refugees to access financial services. To weigh the differences in the effectiveness calculation, I give demand-side interventions a numerical designation of 1 and supply-side interventions a designation of 2.

#### 3. Cost-Effectiveness

Cost-Effectiveness = Cost / Effectiveness

Cost-effectiveness will compare total cost against the effectiveness of each solution, as described above. A low ratio is a positive indicator of the cost-effectiveness of each solution.

#### 4. Political Feasibility

Political feasibility will measure the likelihood that each proposed solution will obtain approval and necessary financial incentives from the German government. Since the German government heavily regulates both asylum seekers and the financial services industry, FIs face significant legal barriers to integrating refugees into the formal banking system. Therefore, products and solutions may require exceptional approvals and support from government organizations in the form of financial incentives or progressive regulation.

This indicator will consider the likelihood the alternative receives government approval given both its impact on the national budget and its implications on the security of German residents, including refugee and nonrefugee populations. This criterion ranks against a scale of high, medium, and low, where high indicates that the government will neither have to allocate additional budget to the project nor is security a threat, medium indicates that costs and security may be of concern, and low indicates that costs are highly prohibitive and security is of significant concern.

#### 5. Operational Feasibility

Operational feasibility will measure the capacity FIs currently have to implement each alternatives. This indicator will consider the administration requirements of the proposed alternative. For example, alternatives may require FIs to expand existing capacity and add additional personnel or resources. Operational feasibility will also consider the extent to which

public sector entities must partner with FIs, grading the anticipated ease of operations against potential frictions that are common to new partnerships.

This criterion ranks against a scale of high, medium, and low, where high indicates that the alternative will require few additional resources, medium indicates that alternative will require additional resources and operational enhancements, and low indicates that the alternative will require a significant increase in resources and operational enhancements.

## **Summary of Alternatives**

**Table 2. Summary of Alternatives** 

Let Present Trends Continue	In 2016, the German government expanded the Integration Act, providing language and vocational training to almost 300,000 refugees. In 2016, the Federal Financial Supervisory Authority passed the Payments Account Act, which required German banks to open a basic bank account for legal residents who show a stamped document from the German immigration authority, photo, and personal information, including name, date of birth, nationality, and address (Gondert and Huneke, 2016). Neither has adequately addressed barriers to financial inclusion.
Expand and Share Central Registry of Foreigners (AZR) with Financial Institutions	The German Federal Office for Migration and Refugees (BAMF) would share the existing Central Registry of Foreigners (AZR) with FIs, eliminating the latter's need to independently collect information about potential clients. The AZR would incorporate existing data currently filed with the Registration Office, such as personal information and place of residence, both of which are relevant to FIs (Handbook, 2018). BAMF would assign a unique token to each asylum seeker registered in the system which asylum seekers could reference when opening a bank account.
Incorporate Financial Literacy Training into Existing Integration Curriculum	BAMF would add at least eight hours of financial literacy education to existing integration programs. This training would be in addition to the 600 hours of language courses BAMF currently provides (Gesley, 2016). Current training includes neither financial literacy training nor support with financial services.
Partner with N26 and Subsidize Digital Accounts for all Refugees	This solution would require the government to subsidize digital bank accounts for all refugees with access to a mobile phone, providing refugees with a convenient and low-cost alternative to formal FIs. This solution would require the government to partner with an existing digital FI, so that it does not have to develop the digital banking infrastructure internally or take on the associated liability. In this report, I explore the possibility of a partnership with N26, a popular mobile banking alternative to traditional banking in Germany.

## Analysis of Alternatives

#### Alternative #1: Let Present Trends Continue

#### **Summary**

Relative to its Western European peers, Germany has adopted progressive national and local measures to successfully employ and integrate refugees. In 2016, the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht) passed the Payments Account Act, which requires German banks to offer a basic bank account to legal residents with: a stamped document from the German immigration authority, photo, and personal information, including name, date of birth, nationality, and address (Gondert and Huneke, 2016). Despite this policy measure, 60% of refugees still live in reception centers and football stadiums because they do not have the means or ability to access to housing (Romei, 2017). Thus far, integration efforts have failed to bring this vulnerable population into the formal banking system at satisfactory rate (Shotter, 2016).

#### Description

Since 2015, over one million asylum seekers have applied for temporary residence in Germany. In response, the German government has enacted uniquely progressive policy measures at the national and local levels to successfully integrate refugees and put them in a position to succeed given cultural differences and employment limitations.

- → In 2016, Germany policymakers implemented the Integration Act and the Regulation on the Integration Act, both of which provide support for refugees, including integration classes, vocational training, job opportunities, assignment of a place of resident and the pathway to a permanent settlement program (Gesley, 2016). The integration classes are comprehensive, teaching students German language, history, cultural norms, and law. However, these classes do not include financial literacy training, leaving refugees to navigate the banking system on their own. Integration classes are also oversubscribed, with over 50% of refugees eligible for employment currently enrolled in classes (Romei, 2017).
- → In 2016, the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht) passed the Payments Account Act, which allows legal residents of Germany to apply for a basic bank account with a stamped document from the German immigration authority, photo, and personal information, including name, date of birth, nationality, and address (Gondert and Huneke, 2016). This policy requires banks to accept refugees as clients. However, due to AML-CTF laws, many Fls, particularly those with international operations, hesitate to accept refugee documents as verifiable.

While the number of annual asylum applications has dropped significantly since the height of the crisis in 2015, from 890,000 in 2015 to 186,644 in 2017, Germany continues to face challenges integrating refugees (Chase, 2018). Even with existing efforts, 60% of asylum seekers continue to live in reception centers throughout the country and only 38% of those eligible to work are employed (Romei, 2017).<sup>3</sup> Low levels of financial inclusion exacerbate these issues.

#### Alternative #1: Evaluative Criteria

Criteria	Let Present Trends Continue
Cost-Effectiveness	.008844
Cost Per Refugee	\$9,197.64
Effectiveness	800,000*2
Political Feasibility	High
Operational Feasibility	High

#### Cost

Germany spends at least **\$9,197.64** on each refugee with legal residence in Germany. The government currently spends a total of approximately \$20 billion (.5% of GDP) on programs for asylum seekers within and beyond its borders (Romei, 2017).<sup>4</sup> Of this, the government spends \$9.5 billion on refugees living in German asylum centers and almost \$3 billion on adult refugees who live in their own residence but still receive welfare. This cost includes almost \$750 million spent annually on integration courses (Romei, 2017).

#### **Effectiveness**

The government's current policy impacts **520,000** refugees with a **supply-side intervention**. In other words, Germany's efforts, thus far, have altered the financial services environment so that all adult asylum seekers with legal residence should be able to access to a bank account if they choose to do so. Some estimates suggest that the Sparkasse, local banks that operate checking accounts, have opened up to 150,000 bank accounts (Shotter, 2016). However, most of this activity is concentrated in Berlin.

Germany has also been able to provide language training to over 300,000 refugees (Romei, 2017). Additionally, 20% of all asylum seekers in Germany have found employment.

<sup>&</sup>lt;sup>3</sup> 37% = 160k Employed Asylum Seekers / (800k Total Accepted Applicants\*65%). This assumes an adult/child ratio of 65:35 and 800,000 total accepted asylum seekers. Numbers reported by the Financial Times: https://www.ft.com/content/e1c069e0-872f-11e7-bf50-e1c239b45787.

<sup>&</sup>lt;sup>4</sup> 2015 spending is adjusted for inflation at a rate of 1.38%.

Unfortunately, employment and language skills do not equate to financial inclusion. Most recent estimates suggest that between 300,000 and 500,000 (58- 96% of the adult refugee population) remain unable to access a bank account due to legal barriers (Santos, 2016).

#### **Cost-Effectiveness Score**

This alternative has a cost-effectiveness score of .0088 (\$9,197.64/(520,000\*2)), a relatively high number that reflects the cost inefficiencies of current policies. This number does not fully demonstrate the extent to which current policies do not directly address or reduce barriers to financial inclusion.

#### **Political Feasibility**

The political feasibility of this alternative is **high**. There are no immediate requirements for further approval or financial assistance, beyond setting the annual budget. Current programming costs .5% of GDP, suggesting that the government will continue to approve spending on refugee assistance. Furthermore, this alternative requires neither a change to existing policy nor additional effort on the part of the government to further integrate refugees.

#### **Operational Feasibility**

The operational feasibility of this alternative is **high**. Although the government has implemented policy requiring banks to open accounts for refugees, it has not accompanied this with action enforcement regulation. Unless the government decides to police financial institutions and monitor their acceptance of refugees, there will be no change to current operations of political or financial institutions.

## Alternative #2: Expand Existing Database and Share with Financial Institutions

#### **Summary**

BAMF would share the existing Central Registry of Foreigners (AZR) with FIs, eliminating the latter's need to independently collect information about potential clients. The AZR would incorporate existing data currently filed with the Registration Office, a separate entity that collects personal information and place of residence (Handbook, 2018). BAMF would assign a unique token to each asylum seeker registered in the system which asylum seekers can reference when opening a bank account. Implementation of this alternative would alleviate identification concerns and increase the number of localities in which refugees have the opportunity to bank.

#### **Description**

BAMF collects vocational, medical, familial, and country of origin information as asylum seekers cross into Germany or visit local offices to collect refugee benefits (BAMF, 2018). It stores this information in the Central Registry of Foreigners (AZR).<sup>5</sup> Local registration offices (Meldeamt), which are completely separate from BAMF, record personal information, including date of birth and current address. Although integrating these two systems would improve efficiencies, no single database exists combining the collection or storage of this information. Even without sharing a database with FIs, the act collecting information and making it available to government organizations across Germany alone would simplify refugee intake.

BAMF has a unique opportunity to expand the utility of the AZR by sharing it with FIs. Through this alternative, BAMF would eliminate the need for FIs to collect the exact same information that asylum seekers supply government authorities when applying for permanent residence. Currently, the separation of these two processes duplicates the steps refugees must take, creating unnecessary friction that discourage refugees from opening a bank account.

The natural extension of this alternative is to introduce biometric authentication. BAMF already collects fingerprints from each asylum seeker. Using biometric technology, FIs could use this technology to immediately access and verify an individual's identity without requiring physical proof. Fingerprint authentication is not always accurate, however, raising security concerns. Therefore, the German government would need to look into implementing alternative biometric technologies, such as retina-scanning, that eliminate the need for information sharing. See Appendix Two for more information.

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<sup>&</sup>lt;sup>5</sup> The AZR is available at www.destatis.de.

#### **Pros of this Alternative**

- → **Reducing friction** in a refugee's interactions with FIs is critical to achieving financial inclusion. The process takes a toll on asylum seekers, who must also navigate language barriers, the job search, and, for most, life in a refugee center, where theft of property is always a concern. If an asylum seeker goes to an FI that already has her information, she does not need to spend valuable time and energy overcoming language barriers and repeating the same information she has already given to government authorities.
- → This solution would likely **expand the number of institutions** at which a refugee can bank to branches outside of major cities. Fls in cities, like Berlin, are far more comfortable and prepared to work with refugee customers. However, Germany sends refugees to live throughout the country, putting pressure on Fls in smaller towns and villages that have fewer resources to dedicate to integrating this high-touch community.
- → Because the AZR database already exists, **costs to operate and maintain this solution are low**. Between the AZR and each local registration office's data, German authorities have all of the information FIs require to open a bank account. Sharing this data would, however, require a large systems integration.
- → Over the long-term, integration of **biometric authentication would minimize the steps necessary to open a bank account**. Most importantly, refugees would no longer have to show their paper identification document, a step in the process that carries great stigma. Currently, refugees experience embarrassment when physically showing their refugee papers, a feeling that dissuades many from seeking support services.

#### Cons of this Alternative

- → This solution raises **significant security and privacy concerns**. The confidentiality of customer information makes up a large part of the trust that exists between financial institutions and their clients. Because information sharing is critical to this solution, German citizens may protest the measure. However, there is legal precedence for sharing information in special circumstances, particularly when ensuring compliance with AML-CTF legislation.
- → This solution **does not guarantee refugees will seek out FIs** nor that FIs will target refugees as clients. In order to achieve the desired end, the German government may need to provide additional incentives to either refugees or FIs. For example, the government could offer refugees additional welfare support in exchange for opening and using a bank account. Alternatively, the government could offer banks a special tax break for achieving a certain percentage of refugee clients.
- → **Systems integration** can be an arduous process requiring both parties to update their systems to ensure compatability. This cost is difficult to measure without an in-depth analysis of Germany's current capabilities.

→ The **burden of maintaining the system** will likely fall onto BAMF, who may not have the resources nor the technical ability to oversee an expanded AZR.

#### Alternative #2: Evaluative Criteria

Criteria	Share and Expand Existing Database
Cost-Effectiveness	0.00
Cost Per Refugee	\$0.00
Effectiveness	520,000*2
Political Feasibility	Low
Operational Feasibility	Medium

#### Cost

The cost of this alternative is **\$0** per refugee. Since BAMF already houses refugee data via the AZR, there are no additional costs associated with collecting information or developing a database to store it.

The cost of systems integration, on the other hand, is difficult to estimate. Making the government's system compatible with those of FIs may be prohibitively expensive. However, both parties will likely benefit from existing infrastructure and advanced technology capabilities of FIs. Due to economies of scale, these costs could be low on a per refugee basis.

#### **Effectiveness**

This option impacts **520,000** adult refugees with a **supply-side intervention**. This estimate implies that the entire adult refugee population benefits from the government distributing their information to FIs. Although a supply-side intervention makes it easier for refugees to interact with FIs, the rate at which this solution would include refugees into the financial system is difficult to assess. By sharing information with FIs, the government makes it much easier to onboard refugees. It also makes it easier to target refugees with marketing, assuming the government shares all details included in the existing database. However, these changes do not guarantee that a refugee will open a bank account.

#### **Cost-Effectiveness Score**

This alternative has a cost-effectiveness score of  $\mathbf{0}$  (\$0/(520,000\*2)), which reflects the low cost associated with continuing to collect refugee information and sharing a pre-existing database. These costs do not include the cost of systems integration.

#### **Political Feasibility**

The political feasibility of this score is **low**. Private and public sentiment entities will need to overcome significant security and consumer privacy concerns arising from data sharing in order to implement this alternative. The greatest hurdle will be civic pressure on public officials to safeguard personal information.

Additionally, in order to ensure refugees register with BAMF, FIs, and the German government may need allocate additional budget to this alternative. For example, both parties might want to invest in additional marketing and personnel to communicate and sell to refugees the benefits of accessing formal financial services.

#### **Operational Feasibility**

The operational feasibility of this alternative is **high**. The AZR database exists, with government authorities already working to track each asylum seeker that crosses into Germany. A systems integration with Fls will take time, but IT professionals can manage the transfer. The most critical step for this alternative is for both public and private stakeholders to ensure that the integrated systems adhere to the minimum-security standards. This may add an additional cost to implementation of this alternative.

## Alternative #3: Integrate Financial Literacy Training to Existing Integration Curriculum

#### **Summary**

BAMF would add at least eight hours of financial literacy education to existing integration programs. In 2016, Germany passed the Integration Act, through which the government provisioned funding to develop language and vocational training for the successful integration of refugees into Germany society. The government now provides up to 600 hours of language courses, as well as job placement support to all asylum seekers (Gesley, 2016). This option would incorporate financial literacy training into the existing curriculum, impacting up to 300,000 refugees.

#### **Description**

Refugees do not use existing solutions because products and services are expensive, hard to understand, and difficult to access. Often, these barriers result because refugees do not speak German or lack familiarity with the local financial environment. Government-supported financial literacy education would help to remove some of these barriers.

Since 2016, Germany has expanded existing integration classes to target and make space for those refugees who "have a good chance of staying permanently in Germany (Gesley, 2016). These integration classes are compulsory – refugees who choose not to attend risk losing benefits. In these classes, attendees attend 600 hours of class in which they learn German language, history, and cultural nuances. Integration classes also provide vocational support to any refugee who finds a company to sponsor and train him or her. Most recent estimates suggest that at least 300,000 refugees are enrolled in these courses (Romei, 2017).

Incorporating financial literacy education into the existing curriculum is a simple intervention with demonstrable benefits. The U.S. Committee for Refugees and Immigrants recommends adding up to eight, 60 to 90-minute training sessions that focus on standard personal finance concepts as well as taxes (U.S. Committee for Refugees and Immigrants, 2016).

#### **Pros of this Alternative**

→ Financial literacy training has demonstrable advantages for most participants, as well as the larger economy. In fact, many experts recommend a basic level of financial education for all individuals, including domestic students, in order to benefit national economies. For example, Hanushek and Woessmann (2012) found that **financial educational achievement and GDP are highly correlated**, as are the negative consequences of financial crises and financial illiteracy.

- → This demand-side intervention would give refugees the financial acumen to accompany progress in language and vocational training, so that, when a refugee is ready to find permanent employment, he or she is comfortable working with financial institutions.
- → This alternative is **easy to implement** from a political standpoint (see evaluative criteria below).
- → This alternative is more likely to prompt refugees to seek a bank account through information sharing. Through repetition in weekly courses, refugees both learn that they have the right to a bank account and are continuously reminded to act on that right.

#### **Cons of this Alternative**

- → Although financial education is effective, this intervention does not address the gap in existing products and services. It does not provide any incentives that would persuade an FI to seek out a refugee client.
- → This solution does not guarantee that participating refugees will open a bank account. This alternative relies on refugees to seek out Fls, an action refugees are less likely to take because of mental and time constraints. BAMF and other partners in this scheme might consider connecting enrolled refugees directly to Fls as an additional measure.

#### **Financial Education with Deutsche Bank**

In 2018, Deutsche Bank began offering the Banking Introductory Programme for Refugees, targeting skilled refugees who have previous experience in the banking industry or who are currently enrolled in university in Germany (Deutsche Bank, 2018). During four separate sessions in 2018, applicants have the opportunity to learn about working in Germany, the German financial sector, and the major activities an FI like Deutsche Bank performs, including commercial and private banking.

While this type of program is intended for well-educated individuals interested in a career in the financial sector, it is an indication that banks are willing to not only work with refugees, but also develop programs directed at this underserved market. Deutsche Bank's model provides a starting point for developing an FI-driven curriculum that would become part of the education of the larger refugee population.

#### Alternative #3: Evaluative Criteria

Criteria	Financial Literacy Training
Cost-Effectiveness	0.000167
Cost Per Refugee	\$50
Effectiveness	300,000*1
Political Feasibility	High
Operational Feasibility	Medium

#### Cost

If all refugees currently enrolled in integration courses participate in financial literacy training, the total cost per refugee for the additional course would be **\$50**.

In 2016, Germany spent \$749.5 million on integration courses, a 250% increase over 2015 (Romei, 2015). Assuming 600 hours per integration course, each hour of the program cost \$1.25 million to administer to 300,000 refugees. The cost of adding a course on financial literacy would be comparable to existing language courses. Therefore, adding financial literacy education would cost an additional \$15 million, assuming eight separate lessons consisting of 90 minutes of instruction (or 12 60-minute courses).

There are also opportunity costs associated with this intervention, including the time refugees spend in class as opposed to looking for or engaging in employment.

#### **Effectiveness**

This alternative has the potential to affect up to **300,000** refugees with a **demand-side intervention**. While this intervention directly impacts refugees, teaching financial literacy does not imply possession of a bank account. However, partners could work together to devise a curriculum that reinforces refugees' right to a bank account and explains exactly how to open one. This action would encourage refugees to seek out FIs but does not guarantee the desired outcome.

#### **Cost-Effectiveness Score**

This alternative has a cost-effectiveness score of .000167 (\$50/(300,000\*1)). Although the total cost to implement this alternative is \$15 million, economies of scale make it much more cost-efficient on a per refugee basis. In other words, the cost to add financial literacy training to the curriculum will be the same whether there are two or twenty individuals in each class.

#### **Political Feasibility**

This political feasibility of this alternative is **high**. Germany has already expanded integration courses in response to growing numbers of asylum seekers, suggesting that policymakers

recognize the importance of these courses to successful integration. Evidence suggests that financial literacy training will further support these efforts. Although this policy would add costs to current spending on refugees, at \$15 million, the total cost would amount to just 2% of total spending on integration courses.

#### **Operational Feasibility**

The operational feasibility of this alternative is **medium**. This alternative will require additional resources, including teachers, class materials, and classroom space. More importantly, it will require a large investment of time. 12 hours per integration course is likely the minimum time that BAMF would need to invest into the program. On the other hand, BAMF has past experience with integration courses, which would help to streamline the curriculum development process.

## Alternative #4: Subsidize Digital Accounts for All Refugees

#### **Summary**

The government would partner with digital bank N26, a digital bank that makes financial services available to anyone with a mobile phone, and subsidize accounts for all refugees. Banking with N26 is a convenient and low-cost alternative to traditional banks, however, some experts criticize the medium because it makes formal financial services easily accessible to criminals. In spite of its downside, the benefits to refugees are high – this solution would extend access to the formal financial system to the majority of adult refugees in Germany quickly and efficiently.

#### Description

Digital banking is an alternative to traditional banking that is growing in popularity around the world, particularly in those areas with little existing financial services infrastructure and high rates of cell phone use. For example, Safaricom's mPesa has over 30 million users who leverage the technology to store savings and send P2P payments in countries such as Kenya, Tanzania, India, Albania, and Romania (Monks, 2017). In Kenya, the company estimates that the service has helped "to lift over 2% [households] out of extreme poverty" since launching in 2007 (Monks, 2017).

#### **Peer-to-Peer P2P Payments**

Peer-to Peer (P2P) payments are transactions conducted directly from one individual to another, without going through a financial intermediary, such as a bank. Digital banking has enabled P2P payments.

In the West, P2P payments are also gaining popularity, through the usage of digital apps like Venmo, a subsidiary of digital payments company Paypal, and Zelle, the traditional banking sector's answer to Venmo (Masinde, 2017). Facebook has integrated payments into its social media service, letting users send P2P payments via Facebook messenger.

Mobile banking has become popular because it is widely accessible and inexpensive, with low fee requirements for account holders. The overhead is low because no physical infrastructure is necessary to start up or manage the bank. It also minimizes interaction with formal entities. In those countries where mobile banks have license to operate, anyone with access to a digital screen (desktop computer or mobile phone) can participate in formal banking. N26 has circumvented the need for a physical location where customers can deposit funds by partnering with grocery stores and pharmacies throughout the country. At these convenient locations, customers can deposit cash using a barcode unique to each individual account (N26, 2018).

For this alternative, BAMF would facilitate the creation of and subsidize the maintenance of digital accounts for refugees by collaborating with N26. The government would incur a \$1.50

per month maintenance fee per account with over \$1,000.6 Once BAMF granted a refugee asylum, the institution would encourage her to open an account by presenting her official approved resident status to a local post office. The details of the PPP agreement would ensure that any refugee accepted as a resident would receive approval by N26. BAMF would also work with N26 to expand their onboarding locations to include refugee centers.

#### Why Partner with N26?

N26 is a mobile bank based in Berlin, Germany, that offers digital banking to tech-savvy customers throughout the EU. Unlike mPesa, which leverages existing infrastructures and economies in developing countries, N26 is tailored for compatibility with the European banking system. There are several reasons a partnership with N26 makes sense:.

- 1. Although the bank is entirely digital, it has over 7,000 physical locations where customers can deposit cash (N26, 2018). These are places refugees already frequent, such as grocery stores and pharmacies. Eventually, refugees with long-term employment should not even need cash services, as both direct deposits and cashless transactions are common in Germany. In fact, once the account is open, refugees never need to interact with the bank beyond the cell phone screen.
- 2. The company distributes a Mastercard linked to their individual N26 accounts to all customers, so that customers can make payments without incurring the costs of a cash withdrawal. Since Germany has a sophisticated point-of-sale infrastructure, the ability to pay with a card is critical.
- 3. Investors in N26 include experts in security and payments, such as TenCent and Allianz X, giving the company an edge in its efforts to integrate artificial intelligence and "intelligent technology" into its product (Bishop, 2018).
- 4. N26 offers services throughout the European Union, including in countries where there are similarly large numbers of refugees, such as Italy, France and Austria. The company targets millennials who travel often, providing a mobile option that does not tie customers' money to a national or local bank. Refugees have similar needs and concerns about leaving their money in German Fls. Additionally, with this broad reach, the company has the ability to scale refugee services quickly throughout the continent.

This low-cost solution would enable any legal refugee with access to a mobile phone to open a bank account. N26's digital process not only eliminates the need to work with traditional FIs

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<sup>&</sup>lt;sup>6</sup> Estimate based on monthly deposit fee (N26, 2018).

skeptical of taking on refugee clients, but also simplifies the onboarding process. Although opening a bank account with N26 will still require refugees to go to a physical location to open their own account, they can do so at a post office rather than an FI. Additionally, this alternative is mobile, so refugees in Germany are not tied to the bank or the country. They can move and take their money with them.

It is important to note that mobile banking does raise concerns. For example, the US State Department has identified mobile banking as vulnerable to money laundering and terrorism financing because regulations do not require banks to report transactions below a certain monetary limit (Masinde, 2017). Although the State Department did not identify Germany as a "major money laundering country" in its 2017 report, recent influxes of immigrants may threaten that status (U.S. State Department, 2017). Therefore, policymakers might need to consider additional regulation to insure a partnership with N26 meets international AML-CTF guidelines.

#### **Pros of this Alternative**

- → 90% of refugees living in urban areas have access to a 3G cellphone. Therefore, most refugees in Germany would be able to access mobile bank accounts (Eisenhauer et. al., 2017).
- → Because N26 does not need to build physical infrastructure, the costs of implementation are low. Anticipated costs include monthly maintenance fees as well as any costs associated with onboarding refugees to the system.
- → **N26 accepts German National ID cards** in its list of supported forms of identification.<sup>7</sup> Germany has provided these cards to refugees in the AZR since 2016, so all refugees in the AZR should be eligible for an account (von der Mark, 2016).
- → N26 has partnerships with retailers across the country, **making the solution accessible** even to those refugees living in remote parts of the country.
- → Criminal activity often occurs in the informal financial sector, suggesting mobile banking is a **safer alternative** to allowing refugees to continue to operate in cash.

#### Cons of this Alternative

- → Although many refugees have access to a cellphone, this solution **may not be equitable**. For example, older generations who are uncomfortable with technology may distrust mobile banking or be unable to use this solution.
- → The US State Department has identified mobile banking as a potential **target for money** laundering.

<sup>&</sup>lt;sup>7</sup> For a full list of supported forms of identification, please refer to N26's website: https://docs.n26.com/legal/1607-IDvideoverification-supportedcountries-EN.pdf

→ N26 does not currently work with refugees. In fact, the company currently targets vy millennials who travel often. Because these are two very different target markets, persuading N26 to engage with refugees will be a challenge. The pivot in business strategy may force N26 to reevaluate the bank's risk profile, security measures, and fee structure. For example, refugees may not offset the cost per account because they do not conduct transactions at the same scale and volume as the current target market.

#### Alternative #4: Evaluative Criteria

Criteria	Distribute N-26 Accounts to All Refugees
Cost-Effectiveness	0.00024
Cost Per Refugee	\$220.86
Effectiveness	482,000*2
Political Feasibility	Medium
Operational Feasibility	High

#### Cost

If all the government supports bank accounts for all refugees, the maximum cost per refugee would be **\$220.86**. The maximum cost of this alternative would \$103.36 million, assuming a 1.5% maintenance fee for all accounts and average savings in refugees' checking accounts of \$1,226.98 (Bierbach, 2017).

Opponents may argue that the government could put this funding towards alternative programs for German citizens. However, this solution would promise to cut down on the long-term welfare spending for refugees. As more refugees participated in the formal economy by engaging in sustainable employment and renting their own apartments, they would be less reliant on the state.

#### **Effectiveness**

This solution would impact **482,000** refugees with a **supply-side intervention**. This estimate assumes 90% of adult refugees have access to a smartphone. This solution would transform an existing product so that it would meet refugee needs. As a digital bank account, N26 is convenient, flexible alternative suitable for refugee clients.

#### **Cost-Effectiveness Score**

This alternative has a cost-effectiveness score of **.000236** (\$220.86/468,000). This low score reflects that, although this alternative would be expensive on a per refugee basis, the solution

would be effective as a supply-side intervention that alters the financial services environment to cater better to refugee needs.

#### **Political Feasibility**

The political feasibility of this alternative is **medium**. The government has previously welcomed pioneering policy solutions to refugee challenges, demonstrating that it is willing to be lenient with regulation, such as relaxed id requirements, in order to improve the situation of this specific community. This solution is similarly innovative and has the potential to greatly improve financial inclusion of refugees. Additionally, because N26 has already distributed bank accounts to hundreds of thousands of individuals within Germany, the German government can be confident in the viability of the product. Finally, public-private partnerships can be extremely cost-effective. There are, however, inherent risks to this solution that might dissuade politicians from supporting this measure, including costs, security concerns, and chance of increased criminal activity.

#### **Operational Feasibility**

The operational feasibility of this solution is **high**. N26 already operates bank accounts successfully within the parameters of the German and European financial systems, accepting both a passport *and* signed proof of residence as valid user identification. The company also has partnerships with post offices around the country, where customers can open a bank account, and various grocery stores and pharmacies, where they can make a deposit.

There are a few operational issues of which to be wary. First, this solution would add up to 482,000 users to N26's user database, which may strain the system temporarily. Second, although public-private partnerships often succeed, they can be difficult to manage and fail when costs and benefits are not well distributed. Past studies suggest that this type of endeavor requires a carefully written agreement and delineation of responsibilities. Specifically, the German government would be responsible for budget allocations and rely on N26 to interface with customers and to distribute and maintain the technology.

### **Outcomes Matrix**

**Table 3. Projected Outcomes of Each Alternative** 

	Let Present Trends Continue	Share and Expand Existing Database	Financial Literacy Training	Subsidize N26 Accounts for All Refugees	
Cost-Effectiveness	0.008844	0.000000	0.000167	0.000236	
Cost per refugee	\$9,197.64	0	\$50	\$220.86	
# of Refugees Affected	520,000	520,000	300,000	468,000	
Immediacy of Financial Inclusion	2	2	1	2	
Political Feasibility	High	Low	High	Medium	
Operational Feasibility	High	Medium	Medium	High	

Based on the projected outcomes, the government should pursue **Alternative #4** and partner with N26, subsidizing digital accounts for all refugees.

#### **Policy Recommendation and Implementation**

#### Recommendation

Based on the projected outcomes, the government should pursue Alternative #4 and partner with N26, subsidizing digital accounts for all refugees.

#### **Rationale**

If the German government chooses to pursue Alternative #4, it would extend financial services to 482,000 adult refugees at a cost of at most \$220 per refugee per year, assuming each refugee has over \$1,000 in his or her bank account. This alternative would not only cost less than the status quo but also, as a direct, supply-side intervention, would be a more effective measure to improve refugee access to financial services. By making it cheaper and more convenient for refugees to bank in Germany, this measure would address the gap in products and services that meet the needs of refugees.

This alternative does elicit concerns over security risks and budget allocation. In spite of these, the solution would be more politically feasible than Alternative #2 because it would not require the government to share personal information directly with an external party. Additionally, as a product-centric solution, this alternative offers the most direct route towards inclusion of refugees into the formal financial system, a critical step towards reducing the amount of welfare spent on each individual. As a country that is willing to take policy risks, Germany seems likely to pursue the option that demonstrates the most long-term economic benefits to its economy.

Finally, this alternative places most of the operational and maintenance responsibilities on its private sector partner. As a result, Alternative #4 is more operationally feasible than Alternatives #2 and #3, which would require the government to expand its development and/or provision of services. In order to succeed in implementing either measure, the government would need to commit considerable resources and expertise. N26, on the other hand, has already created a platform that stores customer information securely, as well as a system to onboard new customers and support existing customers. The government would benefit greatly from this existing infrastructure.

#### Implementation: Mastercard as a Partner

Establishing a communication channel with N26 would be the first step towards implementing Alternative #4. The German government would benefit from leveraging Mastercard in this endeavor for several reasons. First, Mastercard has a successful history of working with governments, including those in Western Europe, to extend financial services to refugee and low-income populations. Second, Mastercard has an existing relationship with N26, having established a partnership with the startup in 2017 to issue debit cards and process payments (Mastercard, 2017). Since then, Mastercard and N26 have continued to collaborate on innovative

digital banking solutions. For example, N26 leverages additional Mastercard services, including Mastercard SecureCode, to prevent online payments frauds.

From there, the government and its private sector partners would need to agree to terms for the PPP contract and delineate responsibilities accordingly. Most importantly, the government would need to agree to support refugee onboarding by training N26 and its partners to recognize and accept the government identification papers required to open an account. Currently, N26 onboards customers in person at local post offices throughout the country, using passports or proof of permanent residence. Training personnel to interact with refugees would also be critical.

I recommend that the government and its partners plan to run a small trial targeting refugees in both urban and rural localities before offering this product throughout the country. Although refugees understand the purpose and necessity of having a bank account, it is also true that government interventions offering free services do not always have the desired effect. Well-organized, low-fidelity trials in areas with a substantial population of refugees would allow the government to test the quality of and demand for the solution.

#### **Considerations**

**Expansion of Onboarding Sites** N26 could further improve account support by allowing certified employees to onboard customers at refugee centers, where many refugees continue to live or from which they still collect benefits.

**Collection of Information** The government already has access to the information FIs like N26 require as a result of the asylum application process. However, the political barriers to sharing information are high. While refugees benefit from a convenience perspective if the government hands off information directly to N26, it raises significant security concerns.

**Customer Acquisition** While the government and N26 would provide this service for free, the burden would still be on refugees to seek out a location where he or she could open an account. Therefore, both entities (most likely, the government) would need to invest in marketing, targeting refugees with Arabic-language digital, traditional, and guerilla marketing. These might include Facebook ads, direct mail announcements, pamphlet distribution, or pop-up information sessions in areas with high concentrations of refugees. These efforts would be especially important for those refugees who do not interact often with refugee centers.

**Long-term Provision of Services** As refugees become integrated over the long-term, continuing to provide accounts for free would be neither sustainable nor desirable, as it might create a culture of dependency. Therefore, this solution will need to include a phase out period. The government will need to do further research to identify the optimal point for transitioning refugees away from a free to a paid service.

**Alternative Partners** N26 does not currently target refugees as clients and may be reluctant to do so. However, there may be other private sector organizations with viable mobile banking products that would be willing to work with the government and take on refugee clients. While I recommend that the government partner with N26, there are likely additional private sector institutions with which the government could consider a partnership.

**Additional Security or Product Adaptations** There is a chance that this alternative will require N26 to enhance its existing product to meet minimum security standards. Although the company already uses Mastercard products to secure its technology, the latter may have additional products that increase the security of the refugee offering.

**Expanding Intervention Across Europe** Integration of refugees is not only a concern in Germany, but throughout Europe. As a digital bank with operations throughout the continent, N26 offers a scalable solution to financial inclusion. Germany could be the first of several countries to implement this strategy.

## Appendix One: Integrating Biometric Technology

Biometric identification is a recent technological advancement that makes low-cost financial solutions possible. Biometric identification uses an individual's eyes, voice, and fingerprints, to verify her identity. Biometrics are more secure than traditional government-issued identification cards, which imposters can fake, or passwords, which imposters can hack, because they are unique to each individual. They are also more versatile, with companies, including major telecommunications and payments companies, integrating biometric verification into products such as cell phones and credit cards.

Substituting biometric identification for traditional forms of documentation mitigates some of the problems refugees face in accessing financial services. First, biometric identification reduces the stigma associated with presenting a refugee card as documentation. Biases against refugees, whether real or perceived, dissuade many refugees from using formal financial services. Where biases do exist, bank associates might be less likely to judge an individual because his or her refugee status is unknown.

Second, biometric identification is institution agnostic. The information detailed on a government-issued identification card reflects the country in which the refugee currently resides. This information may differ from that which her destination country requires. The documentation might not be transferable. Biometric identification, on the other hand, does not capture any details other than the shape of the refugee's iris, thumbprint, or vocal tones. Therefore, FIs can easily share this identification information, confident that it will accurately verify an individual's identity. With biometric identification, the refugee is not tied to a specific country or region and can travel more freely.

Finally, biometric technology has the advantage of being anonymous. Fls may choose to assign personal details to an individual's biometric identification. On the other hand, Fls may assign each identity a unique code. This additional layer of security would protect anonymity, an extremely important step for refugees who hesitate to become a part of the formal system for fear of losing refugee benefits.

Since 2003, the European Union has required applicants for permanent residence to provide biometric information via traditional fingerprinting methods. Therefore, the information is already readily available within the government's system. Additionally, FIs have already invested heavily in research and development of biometric technology, as well as its integration with existing technology. For example, CitiBank recently launched Citi Voice Biometrics. Mastercard is pushing consumers to test retina authentication technology via Mastercard Selfie Pay.

Biometric authentication is already becoming common in refugee camps, as well. The UNHCR uses IrisGuard retina-scanning to create unique identification profiles for Syrian refugees in

Jordan. Refugees are then able to make payments throughout the country using retina-scanning point-of-sale (POS) systems. The program has been successful – over 650,000 refugees are enrolled in Jordan. In fact, IrisGuard recently received funding from the IFC to expand its program in the Middle East (Mustafa, 2018). This technology is not yet widespread, but the UNHCR is eager to test the solution in different crises locations. Integrations of this technology with existing POS systems in destination countries, such as Germany, are also possible.

## Appendix Two: Quantitative Assumptions

Quantitative Assumptions	Inflation rate	1.38%
(Bierbach, 2017) (Romei, 2017) (U.S. Committee for Refugees and Migrants, 2016)		
Demographics of Asylum Seekers	Quantity	Unit
Total Federal Spending on Refugees	\$ 20,041.91	million
Current Number of Refugees Supported via Integration Courses alone	300,000	
Asylum Applications since 2014	1.4	million
Asylum Applications accepted since 2014	0.8	million
Number of Asylum Applicants Employed	0.16	million
Number of Asylum Applicants <i>Unemployed</i>	0.196	million
Estimated % of Asylum Applicants who are Adults	65%	
Estimated % of Asylum Applicants who are Children	35%	
Current Welfare Spending in Reception Centers		
Total Cost of Refugees in Reception Centers	\$9,459	million
Number of Asylum Seekers Living in Reception Centers	0.48	million
Cost per refugee	\$25,052.39	thousand
Cost per adult refugee living in an asylum center	\$1,895.16	thousand
Cost per child refugee living in an asylum center	\$1,172.52	thousand
Estimated number of children in reception centers	0.168	million
Estimated number of adults living in reception centers	0.312	million
<b>Current Welfare Spending Out of Reception Centers</b>		
Total granted to adult asylum seekers (on average)	\$9,198	thousand
Living expenses benefits granted to each asylum seeker	\$6,012	
Average rent granted to each adult asylum seeker	\$3,186	
Average rent granted to each child asylum seeker	\$1,961.52	
Total unemployed	\$1,803	million
Integration Programs		
Total Cost of Adding Financial Education to Integration Courses	\$15.00	million
Current Spending on Integration Programs	\$750.00	million
Refugees Served in Integration Courses	300,000	
Current Duration of Integration Courses	600	hours
Cost Per Hour of Integration Course	\$1.25	million
Additional Hours Needed for Financial Education	12	
*assumes 90 m classes, 8 lessons		
Prevalence of Tech Among Refugees		
Cost of the program	\$103.36	million
3G Cellphone Penetration Among Refugees	90%	
Number of Refugees with Access to Mobile Banking	0.468	million
Fee For Maintenance of > \$100	1.50%	
Average Amount in Refugee Bank Account	\$1,226.98	
Cost to the government per refugee	\$220.86	

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