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Financing Immigration

The Financial-Market Value of a Market-Based Immigration System

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The American legal immigration system is in desperate need of reform. One reform idea with far-reaching potential is the immigration tariff: the sale of permanent conditional work and residency visas that we call gold cards at a price set by Congress. Originally proposed by Nobel Prize–winning economist Gary Becker, the sale of visas would create a more efficient and market-based immigration system that adjusts to changing economic conditions. As envisioned in this paper, Congress would set a price for visas that is higher than the worst-case negative fiscal effects and sell as many as the market could bear. Revenue raised from the sale of visas would more than offset any potential negative fiscal effects from immigration and provide a measure of flexible protection for domestic workers. The proposed immigration tariff would not replace other visa categories but would be an additional category.

The economic and financial impact of an immigration tariff, beyond liberalizing the immigration system, would also positively affect debt markets. The price for visas under this policy would be high—$45,000 on average if the purchasers are of the same age and education as those who immigrated during the 2013–2017 period. Many migrant purchasers of gold cards would have to borrow money upfront or enter into income-share agreements to afford these visas. The loans to immigrants to finance the purchase of gold cards could create a substantial financial market. Under conservative assumptions, we estimate that the present discounted value in perpetuity of loans to finance the purchase of gold cards would be $171.9 billion to $721.1 billion. Those estimates are equivalent to between 4.13 percent and 17.31 percent of all existing consumer credit outstanding in the United States as of October 2019.

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IMMIGRATION TARIFF

An immigration tariff would let the government sell gold card visas to migrants at a fixed price determined by Congress. Gold cards would allow migrants to reside and work in the United States legally so long as they are not inadmissible under existing immigration criteria and do not commit any serious crimes.[1] Gold cards would not provide a new path toward citizenship, but their holders could adjust their statuses to green cards and eventually earn citizenship through any other currently existing legal means with some important restrictions. In such a case, a gold card would be exchanged for a green card unless it is still held as collateral for a loan, in which case, the migrant would only be able to earn a green card after paying off the loan.

While on gold cards, migrants would not be eligible for means-tested welfare benefits or entitlement programs and would earn no credits for the latter; although they would have to pay all payroll taxes.[2] Gold card migrants who commit deportable offenses and are removed from the United States would not receive refunds, but if a gold card was collateral for a loan and the migrant was unable to make the payment, then the lender would foreclose, repossess, and resell the gold card to another eligible migrant at the market price (which would likely be below the price set by the government).

Congress could set gold card prices with any goal in mind, but its prime consideration should be covering the worst-case projected net fiscal impact of the marginal gold card purchaser. A previous Cato policy analysis set a visa price from a simple formula based on the National Academy of Sciences (NAS) estimated net fiscal impact of the marginal immigrant in present value terms, which is largely determined by age at entry and education, to guarantee a federal revenue windfall.[3] Age at entry and education are the two variables most predictive of an immigrant's net-fiscal impact, which is more positive when an immigrant enters at a younger age and when he is more educated, all else being equal. Table 1 displays potential visa prices and the estimated net fiscal impact by immigrant age at entry and education.

The NAS net-fiscal cost estimates are a fairly negative estimate compared to other estimates in the peer-reviewed economics literature.[4] We used NAS estimates as a starting point in designing the immigration tariff rates because they are so negative—we wanted to build in wide margins of error.

Migrant workers with less than a high school education who come from the median developing country to the United States see their annual wages rise by about $13,600, adjusted

Table 1
Tariff schedule

Education	Age at entry	Fiscal net present value (75 years, 3% discount rate, dollars)	Tariff rate (dollars)
Less than high school	0–24	$23,000	$15,000
	25–64	-$198,000	$237,600
	65+	-$257,000	$308,400
High school	0–24	$140,000	$10,000
	25–64	-$50,000	$60,000
	65+	-$164,000	$196,800
Some college	0–24	$236,000	$5,000
	25–64	$99,000	$15,000
	65+	-$155,000	$186,000
Bachelor's degree	0–24	$301,000	$1,000
	25–64	$366,000	$1,000
	65+	-$160,000	$192,000
More than bachelor's degree	0–24	$287,000	$5,000
	25–64	$805,000	$1,000
	65+	-$100,000	$120,000

Source: Alex Nowrasteh, "The Case for an Immigration Tariff: How to Create a Price-Based Visa Category," Cato Institute Policy Analysis no. 861, January 8, 2019.

for purchasing power parity.[5] However, most migrant purchasers of gold cards would not have the cash upfront to pay the average purchase price of a visa—which would be about $45,000, according to the average price in Table 1 weighted by the age and education of those who immigrated during the 2013–2017 period. We therefore expect loans and income-share agreements (ISAs) would finance the majority of gold card purchases, in much the same way that lenders finance car loans for qualified purchasers and some colleges and employers offer ISAs.[6] Thus, there would be a prominent role for lenders, financial institutions, employers, and others in helping migrants finance the purchase of gold cards, bringing with it the potential for entirely new financial instruments.

DEBT FINANCING

If Congress allows for the sale of visas through an immigration tariff, a market for gold card credit could be expected to develop within the large U.S. market for consumer credit.[7] This section estimates the potential value of that debt market for gold cards based on simplified assumptions regarding visa pricing and financing options. To the extent practicable, assumptions are based on comparable real-world markets from which we can draw insight. The actual size of the debt market would likely differ, depending on the structure of gold card issuances and the specific circumstances under which a market for financing their purchase might develop. But this basic framework allows for further exploration of the potential benefits of immigration tariffs, gold cards, and the financing options that may develop as a result.

Methodology and Basic Assumptions

To estimate the market size of debt financing options, we first must estimate how many gold cards would be purchased in a given year, at what price gold cards would be offered by the government, and what financing options would be available to purchase the gold cards. We assume that there are three options available to gold card purchasers to finance their visas: cash, debt, or ISAs. We then assume a baseline of 1,000,000 gold card purchases each year, which is the average annual number of green cards issued from 2013 to 2017 rounded to an even number.[8] Using the tariff rate schedule from Table 1, we assume that the average gold card price would be $45,000 if the purchasers are of the same age and education as those who immigrated during the 2013–2017 period.[9] These assumptions radically simplify our estimates.

Next, we assume that credit markets would supply loans to finance 64 percent of the purchase price of a gold card, cash would finance 30 percent of the purchase price, and ISAs would finance the remaining 6 percent. Since the average price of a gold card would be expensive, occasionally as expensive as a house, we use the financing decisions by foreign-born residents who purchase real estate as a decent proxy to estimate how gold card purchasers would finance their visas. In 2018, 64 percent of foreign-born residents who purchased American real estate in 2018 used mortgages, 30 percent paid in cash, and other sources account for 6 percent.[10] We assume that the 6 percent would be ISAs. This works out to 640,000 gold cards financed via lending, 300,000 purchased with cash, and 60,000 financed through ISAs.

Loan and Deal Structure

This section provides a ballpark estimate of this debt market's size using a set of basic assumptions as to the type of loans issued and their valuation. The structure of loans and how financial institutions would lend to gold card migrants are important considerations for estimating the size of the debt market. Instead of pledging real estate as collateral, as in a traditional mortgage, the borrower would most likely pledge his gold card as collateral for a gold card loan. Other forms of collateral such as migrant work contracts, wage garnishment provisions, or loan guarantors could complement or substitute for the gold card as collateral.

We assume that the government would sell 640,000 gold cards annually in perpetuity at an average price of $45,000 each whereby the purchase is financed by debt, which yields a total volume of gold card purchases of $28.8 billion per year payable to the federal government. Cash sales would produce about $13.5 billion in additional annual revenue, and ISAs would add about $2.7 billion. Next, we assume that the number of gold cards sold annually would remain constant far into the future so that the annual dollar value of gold card purchases would also stay constant.

There is some uncertainty in calculating the cost of capital for gold card loans, because borrower creditworthiness would be heterogeneous due to purchaser differences in wealth, income, age, and profession, as well as because purchasers would mostly lack a credit history in the United States that lenders could use to estimate the likelihood of repayment. Therefore, in order not to overestimate the size of the gold card loan market, we use conservative assumptions regarding discount rates for gold card loans. Specifically, we discount annual loan volume using two approaches grounded in market data.

The first approach uses a lower-bound discount rate of 3.994 percent in perpetuity, which is the average rate for

30-year fixed rate mortgages from 2015 through December 2019.[11] Using the average 30-year fixed rate mortgage interest rate is an appropriate assumption because some gold cards are as expensive as a house and because about 64 percent of foreign-born residents who purchase a house in the United States finance it with a mortgage. Using this approach, the present value of gold card loans in perpetuity would be $721.1 billion, equal to about 17.31 percent of existing consumer credit outstanding in the United States.[12] We must stress that the mortgage rate used here should be seen as the *absolute lowest bound* rate because mortgages are collateralized debt, collateralized debt has a lower rate because it is less risky, and it would probably be more difficult to collateralize a gold card loan.

The second approach uses an upper-bound discount rate of 16.675 percent for gold card loans in perpetuity. The 16.675 percent rate is the average of prevailing personal loan rates as of January 2020 from Bankrate.com.[13] Specifically, we use the mean of the prevailing rates for "good" and "average" credit scores—14.5 percent and 18.85 percent, respectively. Using the mean rate of 16.675 percent to discount annual gold card loan volumes in perpetuity yields a present value of $171.9 billion, equal to 4.13 percent of existing consumer credit outstanding in the United States.[14]

While there is great variance in our estimates, the figures that result under both scenarios would represent a significant increase in the stock of outstanding credit in the United States to finance the productive addition of workers, entrepreneurs, investors, and other immigrants to the U.S. economy. The above are ballpark estimates based on conservative assumptions and would vary based on market conditions, the immigration statute, and other regulations.

INCOME-SHARE AGREEMENTS

Income-share agreements (ISAs) are financial contracts in which one party promises another party a share of future cash flows in exchange for a fixed sum today. Equity contracts are a common form of ISAs. Milton Friedman in 1955 proposed ISAs to finance higher education.[15] Friedman believed that given the absence of physical collateral in human capital accumulation, debt contracts (such as student loans) would be unworkable. While debt remains the norm for most university financing in the United States, the Department of Education offers income-based repayment options that resemble ISAs.[16] Furthermore, in recent years some U.S. universities, notably Purdue University, have begun to offer ISAs as a form of student aid.[17]

We assume that 6 percent of the market for gold card visas would take the form of ISAs between U.S.-based entities (mainly employers and nonprofit institutions) because immigrants are likely to be cash-constrained but will own valuable and noncollateralizable human capital that would generate future income. A stylized ISA would promise the funder a percentage of the immigrant worker's gross or net earnings for a period following the worker's arrival in the United States.

There are several design issues that gold card ISAs would confront. Like education ISAs, funders would have to guard against adverse selection, whereby immigrant workers less likely to have high earnings would more readily sign an ISA. Similarly, the earnings-dependent nature of ISAs would make some form of regular monitoring necessary. Finally, ISAs would have to stipulate the gold card purchaser's obligations in the event of deportation, job loss, or disability.

None of these design problems are insurmountable. For example, many higher education ISAs attempt to mitigate adverse selection by placing a cap on the maximum amount that funders may collect—typically 2 or 2.5 times the loan received.[18] The need to monitor effort, particularly in occupations where worker substitution is easy, means that employers might emerge as the main funders of ISAs and would deduct a portion of workers' earnings from paychecks.

Given the novelty of gold card ISAs, one can only speculate as to the contractual arrangements that might emerge to address potential deportation, job loss, or disability. ISAs might revert to a debt contract for the remainder of the amount owed, thus creating a fixed liability on the worker. Larger employers might simply assume that a percentage of their ISAs would fail and would price those default costs into the agreement. Alternatively, large third-party funders could emerge to perform pooling, underwriting, and servicing functions on behalf of employers in exchange for a fee. Although there are some possible problems with ISAs for gold card purchasers, there is a big incentive for immigrants and employers to resolve them creatively.

CASH MARKET

We assume that an average of 30 percent of the value of gold cards purchased annually would be paid for in cash. According to the tariff schedule in Table 1 that was used as a basis for estimating the average price of a gold card, more-educated and younger immigrants would pay a much lower price than older immigrants who are less educated.[19] Thus, most of the cash purchasers of gold cards would be highly educated and young foreigners with job prospects in the United States.

DISCUSSION

There are competing arguments for why debt or equity contracts would be prevalent in the market for gold card visa financing. The potential for adverse selection, the difficulty of monitoring worker effort, and the possibility that visa holders might leave the country before the term of the contract ends all speak in favor of debt over equity arrangements. On the other hand, the absence of collateral, the challenge of underwriting purchasers who would have no U.S. credit or work history, and the high variability of individual workers' earnings suggest that ISAs might play a larger role than we anticipate. Furthermore, the ability to pool vast financial resources from informal networks such as family loans to purchase gold cards might make the cash market much larger than we anticipate.

The issue of collateral is important for the debt contracts market. To address this, we propose that gold cards would be private property owned by migrants that could be used for collateral for loans sold on a secondary market for the market-determined price (which would be lower than the price set by the government), so long as purchasers are also not inadmissible under existing criteria and do not commit a deportable offense. Work contracts, wage garnishment provisions, or loan guarantees would also give funders greater assurance of repayment. Such arrangements would help overcome migrants' lack of credit histories in the United States on which to rely in their applications for funding and would allow for lower interest rates on gold card loans.

While gold cards would be priced to offset the possibility of a negative fiscal impact from immigration, they would be a form of human capital investment to migrant workers: acquiring the right to work in the United States to raise their lifetime earnings. The willingness to purchase visas itself would be a sign of productivity, as immigrants would show a belief that they would be able to make a marginal contribution to the U.S. economy, relative to what they might have earned elsewhere, in excess of their net fiscal impact represented by the gold card price. Thus, gold cards can be viewed as the most market-friendly merit-based means of selecting migrants with the greatest productive potential.

Options and the securitization of gold card loans into visa-backed securities could facilitate the emergence of an even larger and more dynamic market to finance gold cards. Selling options whereby migrants could pay off their ISAs early could create a large secondary market. Furthermore, once the market understands the risk of lending to migrants to purchase gold cards, financial institutions could combine them into visa-backed securities to create a more predictable financial market. Securitized gold card loans could create an enormous financial market, but we do not attempt to estimate the size here because so much would depend on how the market for gold card loans would function under real market conditions subject to the rules and regulations that would accompany an immigration tariff. Because those factors are unknown, we leave that more complex modeling to others. However, the possibilities for creating future financial instruments based on financing gold cards is limited by the extent of the market's imagination and the rules of exchange.

CONCLUSION

Adding an immigration tariff as proposed here would be a welcome reform to our immigration system and raise a large amount of revenue for the federal government. In most cases, migrant purchasers of gold card visas sold under the immigration tariff would have to borrow to finance their purchases. As a result, American lenders would likely create a substantial new market to finance the purchase of valuable gold card visas by ambitious migrants. Under our simple assumptions, we estimate that the present discounted value in perpetuity of loans to finance the purchase of gold cards would be between \$171.9 billion and \$721.1 billion. As of October 2019, those estimates are the equivalent of between 4.13 percent and 17.31 percent of all existing consumer credit outstanding in the United States. In addition to liberalizing immigration, an immigration tariff could also create a whole new sector within the financial industry.

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NOTES

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13. "Best Personal Loan Rates for January 2020," Bankrate, https://www.bankrate.com/loans/personal-loans/rates/.

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15. Milton Friedman, "The Role of Government in Education," in *Economics and the Public Interest*, ed. Robert Solo (New Brunswick, NJ: Rutgers University Press, 1955), pp. 123–44.

16. "Federal Student Aid," U.S. Department of Education, https://studentaid.ed.gov/sa/repay-loans/understand/plans. The main difference with Friedman's ISA proposal is that income-based repayment plans in the United States and elsewhere are not designed to be revenue-neutral.

17. Bair and Cooper, "Future of Income-Share Agreements."

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19. Nowrasteh, "Case for an Immigration Tariff."

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