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Revealing 21 per cent of GDP in hidden assets: Evidence from Argentina's tax amnesties

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Revealing 21 per cent of GDP in hidden assets

Evidence from Argentina's tax amnesties

Juliana Londoño-Vélez¹ and Dario Tortarolo²

September 2022

Abstract: This paper studies the effectiveness of tax amnesties and their impacts on capital taxation and public spending. We leverage rich policy variation from Argentina, where left- and right-wing governments implemented multiple programmes and achieved varying success. After numerous failed enforcement efforts, its 2016 scheme reportedly revealed assets worth 21 per cent of GDP—the world’s most successful tax amnesty. We use detailed data from fiscal tabulations spanning two decades and obtain three key results. First, despite substantial offshore tax evasion, declared foreign assets quadrupled after the 2016 amnesty. Second, disclosures were extensive among the wealthiest 0.1 per cent of individuals, who more than doubled their declared assets. Third, improving tax compliance has sizeable fiscal externalities on capital taxes and social transfers: the wealth and capital income tax bases more than doubled, and the amnesty’s earmarked revenue boosted pension benefits by 15 per cent. We conclude by discussing the lessons from Argentina’s experience with amnesty programmes.

Key words: tax evasion, amnesties, enforcement, Argentina

JEL classification: D31, H26, H31

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1 Introduction

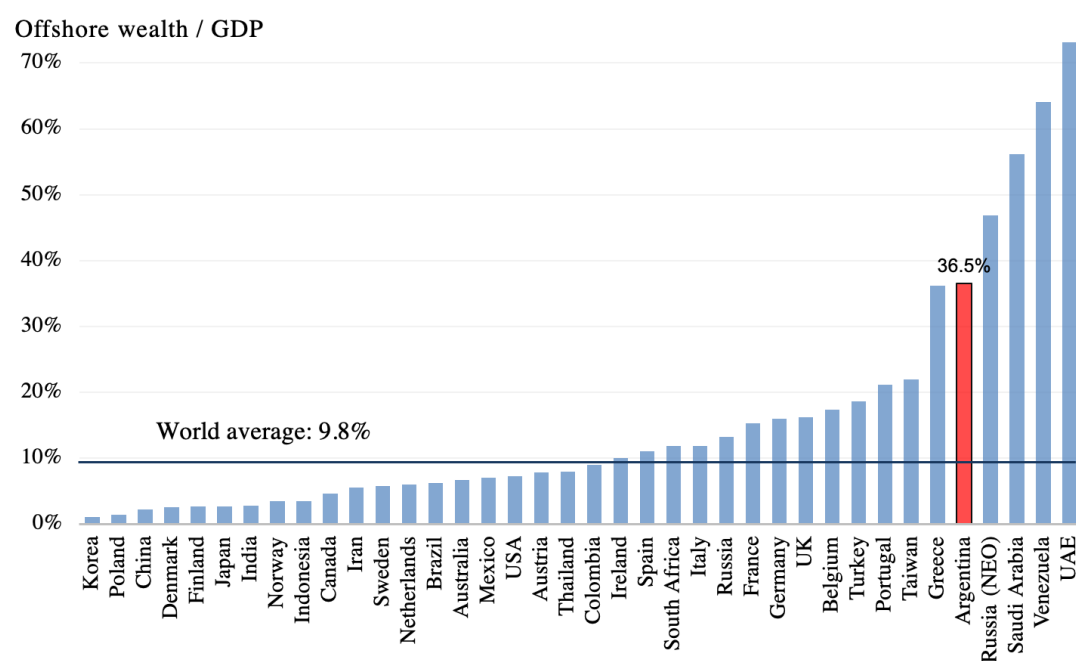
Offshore evasion poses a severe challenge for tax policy (Slemrod 2019; Tørsløv et al. 2022). Households hold around 8 per cent of their financial wealth in tax havens (Zucman 2013), and most offshore wealth is owned by a few individuals at the top of the income and wealth distributions (Alstadsater et al. 2019; Guyton et al. 2021; Londoño-Vélez and Ávila-Mahecha 2021). In recent years, governments worldwide have conducted a series of enforcement initiatives to improve wealthy households' tax compliance, including the OECD's Common Reporting Standards, cross-country automatic tax information exchange agreements (TIEAs), and the US Foreign Account Tax Compliance Act. In addition, over 50 countries have sought to entice wealthy evaders to disclose their foreign incomes and assets in exchange for reduced penalties and no prosecution (OECD 2015).

Despite their widespread use, tax amnesties remain controversial and differ drastically in how effectively they improve tax compliance. Part of what drives these differences may be that tax evaders can perceive few benefits to coming forward and choose not to participate. In addition, amnesties may erode tax morale and discourage compliance if honest taxpayers feel that participants' sanctions are not sufficiently punitive. Understanding what makes a tax amnesty effective in boosting tax revenue and improving compliance is crucial for tax enforcement and the conduct of tax policy. However, it has been hard to draw lessons from countries' varying experiences because programmes vary markedly in their design features, and countries have diverse baseline evasion rates and enforcement capacities.

This paper studies the effectiveness of tax amnesties and their impacts on capital taxation and public spending. We focus on the case of Argentina, which is particularly well suited to examining these issues. First, there is a lot at stake: Figure 1 shows that the equivalent of 36.5 per cent of the country's gross domestic product (GDP) had been stored offshore before the recent amnesties—nearly four times the world average (Alstadsater et al. 2018). Second, Argentines report their (domestic and foreign) wealth annually to the tax authority because there is a gross wealth tax on individuals and firms. Third, Argentina's rich policy variation offers the world's largest natural experiment with tax amnesties. In the last 14 years, both left- and right-wing governments implemented voluntary disclosure schemes, modifying their scope and implementation features. As a result, the amnesties varied drastically in their effectiveness: official statistics report the value of assets disclosed range from less than 0.5 per cent of GDP in 2015 to 21 per cent of GDP in 2016, with the latter being considered one of the world's most successful tax amnesties.

Using detailed tax tabulations spanning two decades provided by the Argentine tax authority, we first shed light on the nature and prevalence of tax evasion revealed by the amnesties. There is substantial offshore evasion: over 80 per cent of the assets disclosed during the 2016 amnesty had been hidden abroad, mainly in tax havens or low-tax jurisdictions like Uruguay, Switzerland, and the British Virgin Islands, though a meaningful share was in the United States. Most foreign assets disclosed were financial: nearly half were stocks, and almost one-quarter were bank accounts and currencies. Approximately 255,000 evaders came forward, tripling the number of people declaring foreign assets in their wealth tax returns. In addition, after 14 years of remarkable stability, foreign assets quadrupled from Arg\$250 billion in 2015 (4.3 per cent of GDP) to Arg\$1 trillion in 2016 (16.5 per cent of GDP) and reached Arg\$1.25 trillion in 2019 (20.7 per cent of GDP). As a result of these massive disclosures, Argentines today report that nearly one-half of all their assets are offshore, bringing the country much closer to the macro estimates of offshore wealth (Alstadsater et al. 2018).

Figure 1: Argentina owned the equivalent of 36.5 per cent of GDP in offshore wealth



Note: this figure shows the amount of household wealth owned offshore as a percentage of GDP, in 2007. Argentina, highlighted in red, owns the equivalent of 36.5 per cent of GDP in offshore wealth.

Source: authors' compilation based on data from Alstadsater et al. (2018).

Because offshore evasion tends to be highly concentrated at the top of the distributions of income and wealth, Argentina's amnesty boosted the total wealth reported by the wealthiest individuals. Indeed, we examine the distributional effects of tax amnesties and find that four years after the amnesty, the wealthiest 0.1 per cent of adults reported owning two to three times more assets than before the scheme. Crucially, since these high-net-worth individuals hold most of their wealth offshore, the amnesty revealed substantial foreign assets at the top, tripling the share of foreign assets declared by the top 0.1 per cent. This enabled Argentina to raise revenue by levying taxes on offshore wealth, making the tax system more progressive.

Next, we analyse the fiscal externalities that asset revelations have on capital taxation and public spending. On the tax side, we examine impacts on Argentina's wealth tax and capital income tax. The 2016 amnesty expanded the wealth tax base by doubling reported assets. As a result, the wealth tax revenue more than doubled in 2018 and tripled the next year following a wealth tax hike, reaching nearly 1 per cent of GDP in 2019—one of the world's most successful wealth taxes in terms of revenue.¹ In addition to boosting wealth tax revenue, the amnesty also boosted taxable capital income as disclosers declared larger asset returns. We show that the number of taxpayers reporting some capital income doubled, and the capital income tax base tripled. Critically, the expanded capital income tax base persisted four years after the amnesty programme ended, suggesting a lasting improvement in tax compliance.

On the spending side, we show that the tax revenue collected from the amnesties raised public spending. We focus on the 2016 amnesty, whose 'special' tax revenue was earmarked to fund the public pension system. Using pension benefits data from Argentina's Social Security Administration, we compare the average pension of retirees against the monthly minimum pension, which is not affected by the

¹ Furthermore, thanks to this expanded wealth tax base, in 2020 Argentina financed healthcare expenses and its expansion of the social safety net in response to the COVID-19 pandemic by imposing a one-off wealth tax surcharge on the richest 12,500 individuals—that is, roughly the top 0.05 per cent.

policy, before and after its implementation. Thanks to the additional resources, the programme increased pension payouts to older citizens by 15 per cent.

Lastly, we find suggestive evidence that Argentine taxpayers do not repatriate their offshore assets, despite sizeable tax incentives for repatriation. First, we find little evidence that repatriation clauses, often included in tax amnesties, entice evaders to bring capital back into the country. Instead, most Argentine evaders chose to pay heavier taxes and keep their assets abroad. The lack of repatriation response is surprising in light of Argentina's recent move to impose higher taxes on foreign assets. These results suggest that tax incentives do not explain why Argentines have offshore assets. Instead, we posit that wealthy Argentines keep their wealth abroad to insure themselves against economic volatility, currency controls, high exchange rate fluctuations, and inflation spells, and to obtain higher returns.

We end by discussing what other countries can learn from Argentina's experience with amnesty programmes. While Argentina has some unique features—for instance, a large share of its wealth is located abroad—it also offers rich variation in policy design, contributing to the amnesties' successes and failures. We leverage this variation and contrast the schemes' design and contextual features over the past decade. Specifically, we discuss how the tax incentives, the threat of detection, the programme salience, the compliance costs, and the political economy surrounding each scheme can affect their effectiveness. We argue that Argentina's 2016 amnesty was successful thanks to four main factors. First, well-designed tax incentives that enticed disclosures and rewarded compliant taxpayers to avoid offsetting tax morale. Second, the TIEAs with critical players like Uruguay, Switzerland, and the United States, making the perceived threat of detection more credible. Third, a favourable political economy, with a pro-market and business-friendly president leveraging wealthy Argentines' trust to implement an amnesty programme and garnering taxpayer support by presenting it as a pension reparations programme for older citizens. Fourth, a massive advertising campaign made the programme salient and simplified the disclosure process.

In addition to these policy implications, our paper also contributes to two academic literatures. First, we contribute to the growing literature on offshore evasion (Alstadsater et al. 2019; Zucman 2015). We study the case of Argentina, where the overwhelming majority of individuals at the top of the wealth distribution keep their assets offshore and do not declare them to Argentine tax authorities. Notwithstanding, a well-planned enforcement policy enticed them to come forward, drastically raising macroeconomic calculations of the country's offshore wealth. Second, we contribute to the nascent empirical literature on tax amnesties and voluntary disclosure programmes (Alstadsater et al. 2022; Johannesen et al. 2020; Langenmayr 2017; Leenders et al. 2021; Londoño-Vélez and Ávila-Mahecha 2021). In our view, the Argentine economy is an interesting laboratory because it offers the world's largest natural experiment with tax amnesties, enabling us to shed light on the factors contributing to the effectiveness of tax amnesties. We show how such a policy can reveal substantial offshore assets, even in a country with a lot at stake and a history of failed amnesty programmes. In doing so, we show that tax evasion by the wealthy can have sizeable fiscal externalities on capital taxation and public spending.

The remainder of this paper is organized as follows. Section 2 describes the institutional context and the data. Section 3 presents the results on the effectiveness of Argentina's amnesties. Section 4 discusses the policy design and contextual features of the various amnesty programmes. Lastly, Section 5 briefly concludes.

2 Context and data

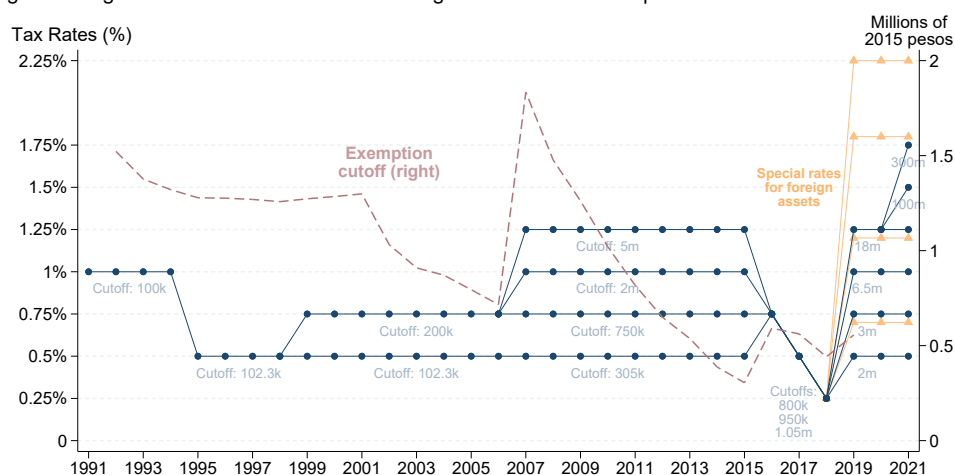
2.1 Wealth taxation in Argentina

Argentina has levied a recurrent wealth tax on individuals and firms since 1991 (Law 23.966). Unlike other wealth-taxing countries, Argentina's wealth tax is levied on all *gross* assets and does not allow discounting debt from the wealth tax base. The tax base includes all worldwide assets—that is, assets held domestically and abroad—on 31 December. The broad tax base includes real estate, vehicles, foreign currency, cash, checking account balance, shares, and some securities. There are two exemptions during our study period: (1) savings accounts and term deposits held at Argentine banks; and (2) securities, bonds, or other negotiable instruments issued by the public sector.

Figure 2, which plots Argentina's wealth tax schedule since 1991, shows significant variation in who pays the wealth tax and the wealth tax rate, resulting from Argentina's frequent tax reform episodes and high-inflation spells generating substantial 'bracket creep'. For example, between 2007 and 2015, Argentina's annual inflation rate ranged from 10 to 40 per cent (Figure A1 in Appendix A). As the wealth tax's filing and the exemption thresholds were nominally defined, inflation tripled the number of taxpayers filing and paying the wealth tax from 250,000 to over 750,000, peaking at around 2.5 per cent of all adults aged 20 and above (Figure A2).

In addition, Figure 2 shows that Argentina's wealth tax rates have historically ranged from 0.25 to 2.25 per cent. Between 2007 and 2015, the wealth tax schedule featured four tax rates, ranging from 0.5 to 1.25 per cent (Law 26.317). A tax reform initiated in 2016 by the Macri administration unified the tax rates to a single rate of 0.75 per cent in 2016, 0.5 per cent in 2017, and 0.25 per cent in 2018, and introduced a tax amnesty (Law 27.260), which we describe below. In 2018, the same administration replaced the single tax rate with three progressive rates ranging from 0.25 to 0.75 per cent, to be effective in 2019 (Law 27.480). However, the new Fernández administration replaced 2019's wealth tax schedule with eight different rates depending on the asset's location (Law 27.541 and Decree 99/2019).

Figure 2: Argentina's wealth tax rates have ranged from 0.25 to 2.25 per cent



Note: this figure plots the wealth tax schedule in Argentina between 1991 and 2021, showing sizeable variation in the exemption cutoff and bracket schedule. The left axis plots the statutory wealth tax rates and associated bracket cutoffs in current pesos. Because these cutoffs are nominally defined, high-inflation spells cause 'bracket creep': the exemption cutoff (plotted in the right axis and expressed in millions of 2015 pesos) dropped between 2007 and 2015. Moreover, Argentina's wealth tax rates have historically ranged from 0.25 to 2.25 per cent, with reforms taking place in 1995, 1999, 2007, 2016, and 2019. For instance, in 2016 Argentina replaced the bracket schedule based on four average tax rates with a single marginal rate of 0.75 per cent and raised the filing threshold.

Source: authors' compilation based on Table A1.

2.2 A brief history of Argentina's recent experience with amnesties

Argentina has a history of tax amnesties, varying substantially in policy design, contextual features, and revenue collection. Right- and left-wing governments have implemented five different tax amnesties since the country's return to democracy in 1983. We focus on Argentina's last three amnesties, which took place within seven years: the Fernández de Kirchner administration implemented two amnesties in 2009 and 2013–15, and Macri implemented one in 2016. As summarized in Table 1, these amnesties differed in their effectiveness and how much revenue they collected: the Fernández de Kirchner amnesties revealed assets worth 0.5–1.3 per cent of GDP but had little impact on tax revenue. In comparison, Macri's programme disclosed assets worth 21 per cent of GDP and raised 1.8 per cent of GDP in revenue from penalties. Furthermore, the three schemes varied radically in their scope, penalty rate, repatriation requirement, the availability of cross-country TIEAs, and whether compliant taxpayers were awarded tax benefits, among other things. We describe Macri's 2016 amnesty programme in the remainder of this section and compare it with the previous two amnesties in Section 4.

Table 1: A comparison of Argentina's recent tax amnesty programmes

	2009	2013–15	2016
President	Fernández	Fernández	Macri
Political inclination	Left	Left	Right
Can you disclose foreign currencies?	✓	✓	✓
Can you disclose assets?	✓		✓
What is the maximum penalty?	8%	0%	15%
Is there a penalty for disclosing?	✓		✓
Is there a reduced penalty for repatriation?	✓		✓
Is repatriation required?		✓	
Is there a credible information exchange threat?		~	✓
Is there legal certainty? (Currency controls)			✓
How many people disclosed?	35,000	16,000	255,000
How much was disclosed? (% GDP)	1.3%	0.5%	21%

Note: this table compares the features of Argentina's recent tax amnesty programmes. The features of each amnesty were drawn from Law 26.749 for the year 2009, Law 26.860 for the period 2013–15, and Law 27.260 for the year 2016. The 2013 amnesty was meant to last three months, but was extended on nine occasions until December 2015.

Source: authors' compilation.

Passed on 29 June 2016, Macri's temporary tax amnesty took place for nine months, from August 2016 to March 2017 (Law 27.260). It allowed Argentine residents and companies to disclose undeclared foreign or domestic assets and currencies held as of 22 July 2016. The programme granted participants tax and non-tax benefits. Before the amnesty, evaders caught cheating on their wealth and income tax duties paid 2–10 times the taxes evaded and could be subject to imprisonment. By contrast, the amnesty established a lower rate, depending on the asset type, size, and disclosure date. Specifically, real estate assets paid 5 per cent of the asset's value. For all other assets, the penalty varied with the disclosed amount: 0 per cent if less than US\$19,000, 5 per cent between US\$19,000 and US\$50,000, and 10 per cent above US\$50,000. (The latter increased to 15 per cent for assets disclosed after 31 December 2016 to encourage early participation.) However, participants could waive this one-time tax by investing one-third of the disclosed assets in special Treasury bonds or domestic mutual funds for five years. In addition, the programme forgave all liability for taxes and fines and granted participants protection from most types of legal prosecution.²

We highlight four essential features of Macri's amnesty programme. First, the programme rewarded compliant taxpayers to safekeep tax morale while slashing wealth taxes to entice evaders to come for-

² Figure A3 presents an advert used by AFIP (*Administración Federal de Ingresos Públicos*) to encourage participants to disclose under the amnesty programme. The ad compares the penalty using a Arg\$3 million property unreported for five years as a hypothetical example: only Arg\$150,000 under the amnesty, compared to Arg\$6 million outside the amnesty.

ward. On the one hand, the government exempted taxpayers who filed the wealth tax in 2014 and 2015 and did not participate in the amnesty from the wealth tax between 2016 and 2018 (called the ‘good complier’ tax benefit). On the other hand, the government lowered the wealth tax rate for amnesty participants: the *average* tax rates were replaced by *marginal* tax rates and slashed from 1.25 per cent in 2015 to 0.75 per cent in 2016, 0.5 per cent in 2017, and 0.25 per cent in 2018 (Figure 2). Furthermore, there were talks about repealing the wealth tax for all taxpayers starting in 2019. At the time, Macri’s commitment to reduce and eventually abolish wealth taxation seemed credible: Macri represented a new and pro-market government, supported by Argentina’s elite (Sturzenegger 2019), who, as we later show, would benefit from the amnesty programme.

The second key feature is that the Argentine government used the amnesty programme’s ‘special tax’ revenue to fund its public pension system. Officially named the ‘National Program of Historical Reparation for Retirees’, the programme earmarked its revenue to finance reparations to pensioners for unpaid benefits, increase some existing benefits, and fund a new non-contributory pension. In practice, the first chapter of the tax bill restored pension benefits between 1995 and 2008 for approximately 2.3 million people. The second chapter of the bill, called ‘Tax Amnesty Regime’, established the amnesty programme to generate the revenue needed to fund pension debts and benefits.

Third, the amnesty programme was salient. Argentina’s tax authority (*Administración Federal de Ingresos Públicos*, or AFIP for its Spanish acronym) led a massive advertising campaign. For instance, Figure A4 shows three large banners at the entrance of AFIP’s headquarters in Buenos Aires, encouraging evaders to disclose their hidden assets. Figure A5 shows the advert posted on AFIP’s website, and Figure A6 shows screenshots of AFIP’s website promoting disclosures of hidden assets.

Lastly, the threat of detection became more credible after Argentina signed numerous automatic TIEAs in 2016, including treaties with its most relevant tax havens, like Uruguay and Switzerland, as well as with Brazil, Chile, and the United States (Figure A7 plots a timeline of these events). In addition, the Panama Papers were leaked two months before the adoption of the amnesty programme, further raising the perceived threat of detection and its salience, as proxied by Google’s search interest (Figure A8).

The official reports by AFIP, reproduced in Table A2, shed light on the magnitude of disclosures. Nearly 255,000 people and firms participated in Macri’s amnesty programme. Participants revealed assets worth US\$117 billion, representing 21 per cent of Argentina’s GDP in 2016. The success of Argentina’s amnesty surprised even the authorities themselves. According to news reports, the amount collected is six times greater than the government’s initial projections (Telam 2016). Four-fifths of the disclosed assets were abroad, and the remainder in Argentina. Nearly half of the assets disclosed were foreign stock and other investments (10 per cent of GDP). Almost one-quarter represented deposits in foreign bank accounts and currencies (5 per cent of GDP). About 6 per cent corresponded to undeclared cash (1 per cent of GDP).³ Lastly, almost one-fifth came from real estate (4 per cent of GDP), corresponding to 167,000 previously hidden properties. The penalties raised US\$9.5 billion in revenue, equivalent to 1.8 per cent of GDP (AFIP 2017). These numbers suggest that Argentina’s 2016 amnesty programme is one of the world’s most successful tax amnesties in the sheer value of the amount disclosed and the revenue collected from penalties.

2.3 Data

We use data from three primary sources. First, we use information from statistical yearbooks provided by AFIP, representing detailed tabulated data from tax returns for the country’s wealth, income, value-added, and payroll taxes for FYs 2002–20. Our primary analysis uses data from the wealth tax, including

³ Participants deposited this money in a special bank account and reported it to the tax authority.

the tabulations with information on the number of filers and taxpayers, the wealth value, the tax base, and the tax liability. These tabulations also decompose this information by gender, the location of the asset (domestic versus foreign), the type of asset, the industry sector, and many wealth brackets. In addition, we use information from the income tax and its four components: rental income, capital income, business income, and labour income. The income tax tabulations include the number of filers and taxpayers and information on the asset value, debts, and net worth.

Second, we use monthly retirement data from Argentina's Social Security Administration (ANSES, for its Spanish acronym). The data consists of monthly tabulations of the number of retirees, the average benefit, and the average by deciles. In Argentina the retirement benefit has two main components: a fixed universal basic amount and a variable social insurance component for persons aged 65 or older with at least 30 years of contributions. The latter is 1.5 per cent of the insured's average adjusted monthly earnings in the last ten years multiplied by the number of years of contribution up to a maximum of 35 years. In addition, there is a minimum pension that acts as a floor, akin to minimum wages for low-skilled workers. All benefits are automatically adjusted for inflation twice a year, in March and September. Critically, the minimum pension is fixed by law. (For this reason, Section 3.4 leverages the fact that the minimum pension cannot be affected by the reparations programme to proxy how average benefits would have evolved absent the policy.)

Lastly, we collected monthly data on the reparation spending funded by the amnesty's revenue from a series of public government memos. Specifically, we use ANSES information from the government's reports to Congress numbers 97, 99, 101, 103, 112, and 116.

3 The effectiveness of Argentina's tax amnesties

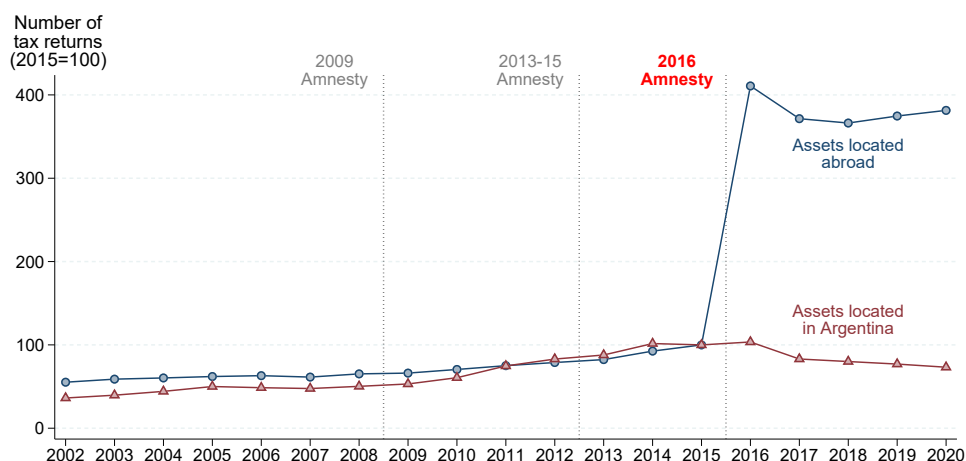
This section examines the effectiveness of Argentina's tax amnesties. Section 3.1 sheds light on the nature and prevalence of tax evasion revealed by Argentina's amnesty programmes. Section 3.2 discusses the distributional patterns of tax evasion and their implications for the tax system's progressivity. Finally, Sections 3.3 and 3.4 analyse the fiscal externalities that asset revelations have on the wealth and capital income tax bases, and pension spending, respectively. Finally, Section 3.5 discusses whether taxpayers repatriate their foreign assets in response to tax incentives.

3.1 Revealing foreign and domestic assets

Figure 3 plots the number of wealth tax filers declaring assets owned domestically and abroad. The series is indexed to equal 100 in 2015, before the 2016 amnesty. Several striking results emerge from this figure. First, neither the 2009 nor the 2013–15 amnesties affected the number of people reporting assets to the tax authority. By contrast, there is a spectacular increase of 310 per cent in the number of taxpayers reporting to own foreign assets in 2016, consistent with the amnesty encouraging people who owned foreign assets to declare them. Second, this increase persisted even four years later. By contrast, the number of taxpayers reporting assets in Argentina did not change much after 2016.⁴ Indeed, offshore evasion was the primary form of evasion, and the amnesty significantly encouraged evaders to come forward.

⁴ Figure A9 displays the number of tax returns reporting foreign assets in levels. The number of wealth tax returns reporting foreign assets quadrupled from 28,816 to 118,368 between 2015 and 2016. In contrast, the number of wealth tax returns reporting domestic assets remained relatively stable at 1,241,683 and 1,285,537 in 2015 and 2016, respectively.

Figure 3: A 310 per cent increase in the number of taxpayers declaring foreign assets



Note: this figure plots the number of taxpayers declaring assets owned domestically and abroad. The series is indexed to equal 100 in 2015, before the 2016 amnesty. Neither the 2009 nor 2013–15 amnesties affected the number of people reporting assets to the tax authority. By contrast, there was a 310 per cent increase in the number of taxpayers reporting to own foreign assets in 2016, which persisted even three years later, consistent with offshore evasion being the primary form of evasion. Source: authors' calculations using data from the AFIP statistical yearbooks.

In addition to inducing evaders to report offshore assets, the 2016 amnesty also encouraged people to declare more of them. Figure 4 plots the total value of declared domestic and foreign wealth in constant 2015 pesos. Figure 4(a) expresses the series indexed to equal 100 in 2015, while Figure 4(b) reports the absolute values. The figure shows that the value of domestic and foreign assets is remarkably stable between 2002 and 2015. Between 2015 and 2016, domestic assets increased by a modest 13 per cent (Table 2). By contrast, foreign assets increased by 311 per cent, quadrupling from Arg\$250 billion in 2015 (4.3 per cent of GDP) to Arg\$1 trillion in 2016 (16.5 per cent of GDP) and reaching Arg\$1.25 trillion in 2019 (20.7 per cent of GDP). As a result, in 2019 Argentines reported owning the same amount of wealth domestically and offshore.

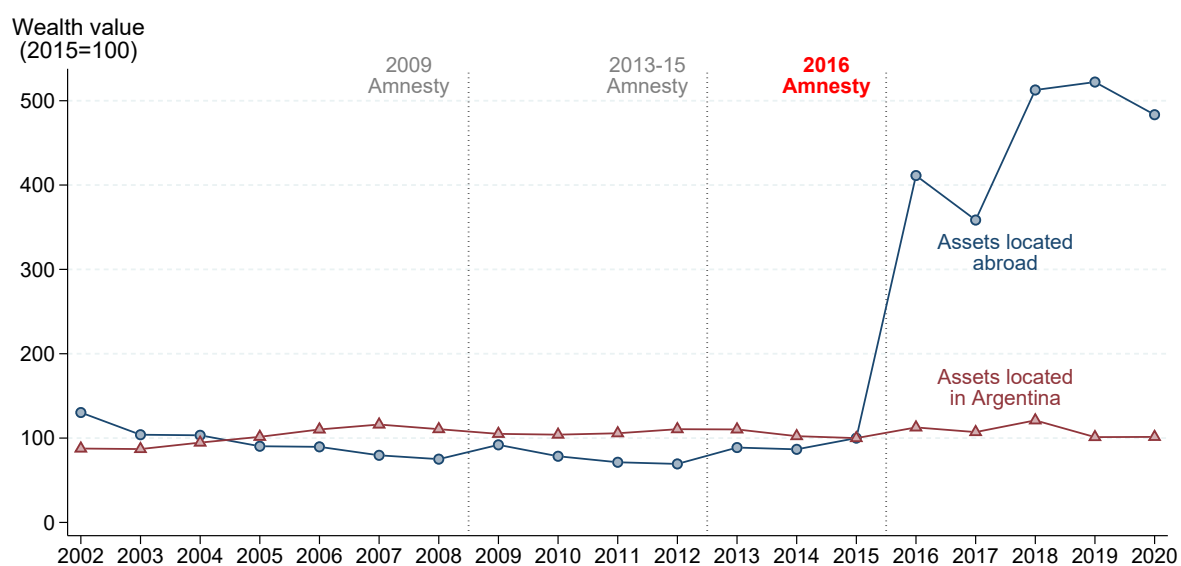
Figures 5 and 6 decompose these results by asset type. Figure 5 shows that the number of people reporting foreign stocks and real estate increased by nearly 500 per cent in 2016 relative to 2015. Similarly, the number of people reporting to own foreign bank deposits and currencies, real rights, and vehicles increased between 150 per cent and nearly 400 per cent. Moreover, Figure 6 shows that the value of reported foreign real estate increased by 1044 per cent compared to 2015. In addition, declared foreign stock, bank deposits and currencies, real rights, and vehicles increased by 366, 344, 341, and 230 per cent, respectively (Table 2).⁵ By contrast, declared *domestic* assets did not change as dramatically and some assets did not change at all (Table 2).⁶

⁵ Real rights give holders a right to do something with or on the subject property (stronger than the owner's right) and include ownership, use, pledge, usufruct, mortgage, and predial servitude.

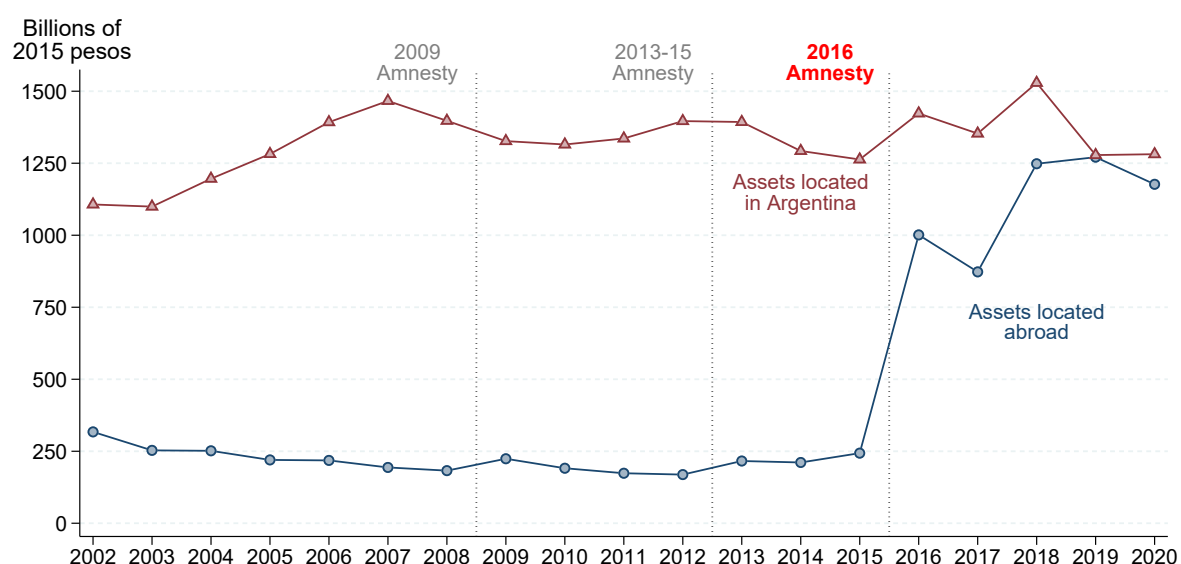
⁶ A notable exception is domestic real rights and stocks, which increased by roughly 70 per cent (Table 2).

Figure 4: A more than 310 per cent increase in the value of declared foreign assets

(a) Relative values



(b) Absolute values

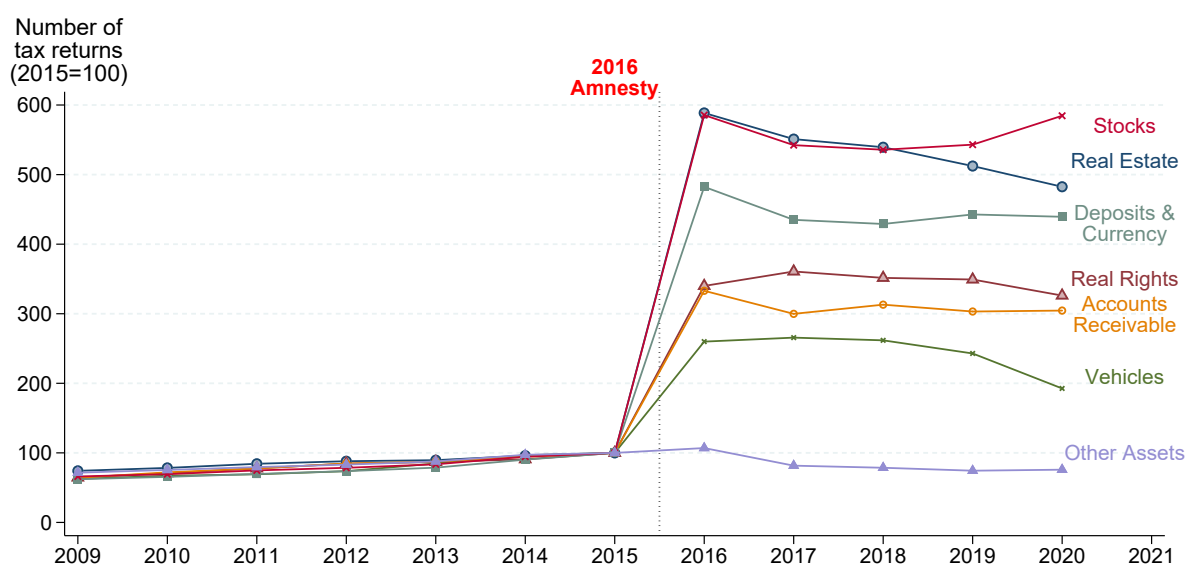


Note: this figure plots the total value of declared domestic and foreign wealth in constant 2015 pesos. Panel (a) expresses the series indexed to equal 100 in 2015, while panel (b) reports the absolute values. The value of domestic and foreign assets is remarkably stable between 2002 and 2015. However, while domestic assets continued in the same trend, the value of foreign assets quadrupled from Arg\$250 billion in 2015 to Arg\$1 trillion in 2016 and Arg\$1.25 trillion in 2019.

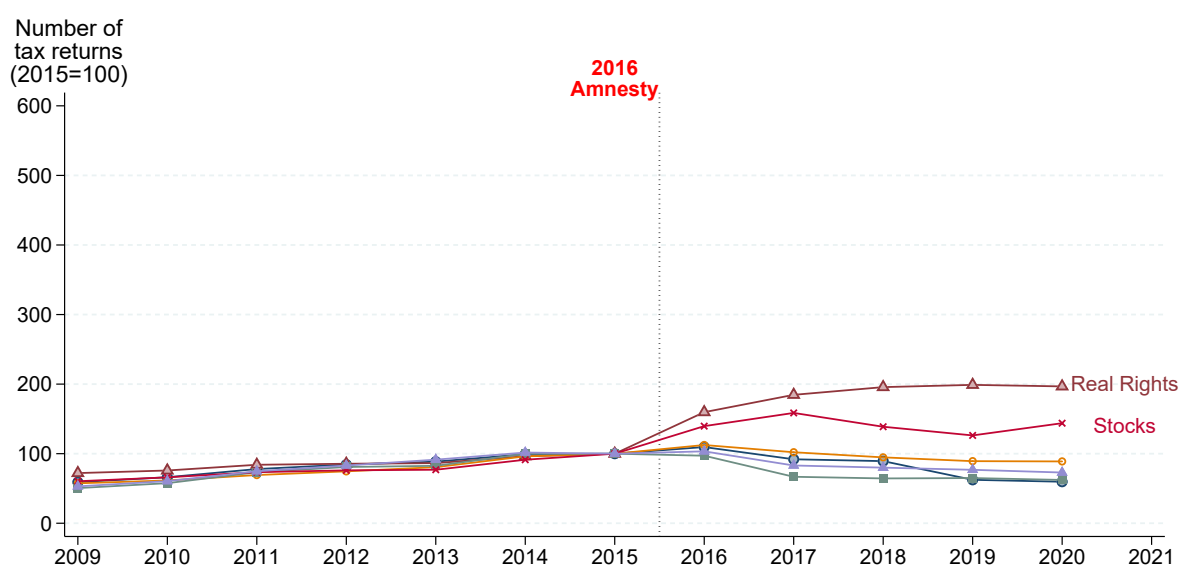
Source: authors' calculations using data from AFIP statistical yearbooks.

Figure 5: The likelihood of declaring foreign or domestic assets by asset type

(a) Foreign assets



(b) Domestic assets

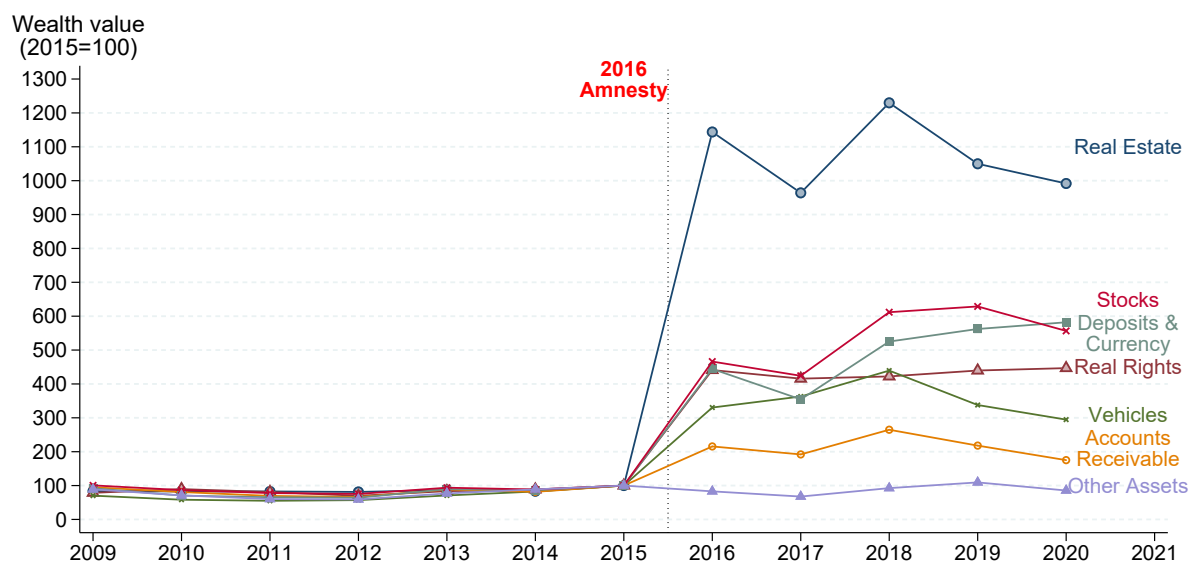


Note: this figure decomposes Figure 3 by asset type and plots the number of taxpayers declaring different types of foreign or domestic assets in panels (a) and (b), respectively (2015 = 100). The number of people reporting foreign stocks and real estate increased by nearly 500 per cent in 2016 relative to 2015.

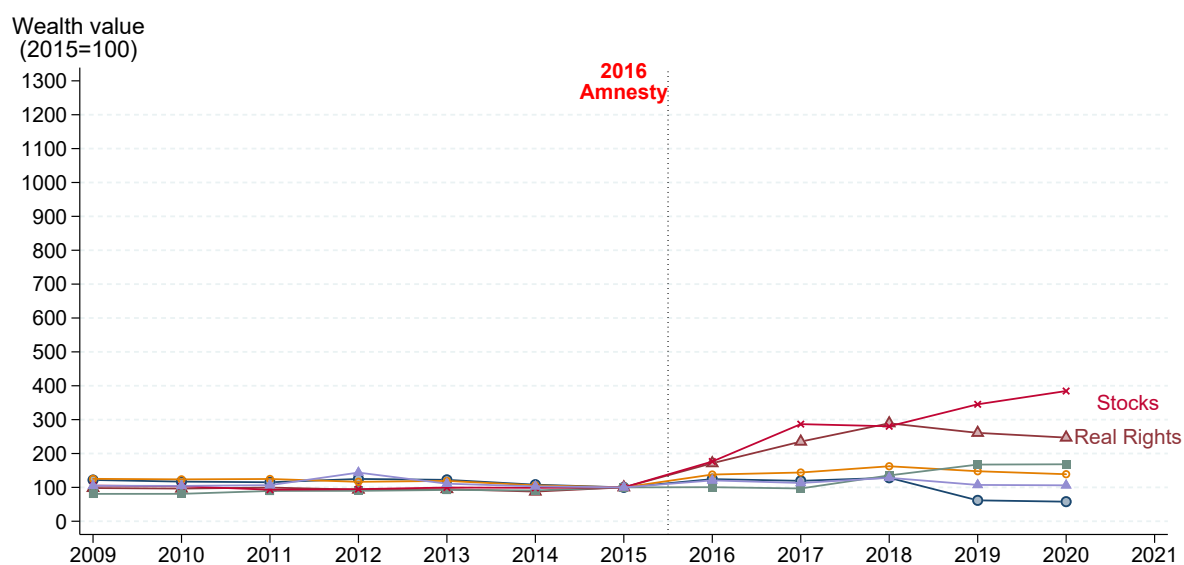
Source: authors' calculations using data from AFIP statistical yearbooks.

Figure 6: The relative value of declared foreign or domestic assets by asset type

(a) Foreign assets



(b) Domestic assets



Note: this figure decomposes Figure 4 by asset type and plots the relative value of different types of foreign or domestic assets in panels (a) and (b), respectively, in constant pesos (2015 = 100). The value of reported foreign real estate increased by more than 1,000 per cent compared to 2015. Similarly, the number of people reporting to own foreign bank deposits and currencies, real rights and credits, and cars and boats increased by 380, 240, and 160 per cent, respectively.

Source: authors' calculations using data from AFIP statistical yearbooks.

Table 2: Domestic and foreign assets in 2014, 2015, and 2016

	Domestic assets			Foreign assets		
	2015 US\$ (1)	2015–14 %Δ (<i>pre</i>) (2)	2016–15 %Δ (<i>post</i>) (3)	2015 US\$ (4)	2015–14 %Δ (<i>pre</i>) (5)	2016–15 %Δ (<i>post</i>) (6)
Deposits and currencies	20,336	10%	1%	4,736	16%	344%
Stocks and investments	1,020	1%	76%	9,297	13%	366%
Real estate	37,230	–7%	24%	792	20%	1044%
Vehicles	13,264	4%	–10%	17	21%	230%
Real rights	174	14%	71%	9	13%	341%
Equity of companies	10,685	–9%	1%	758	43%	–
Accounts receivable	7,659	–6%	38%	1,042	23%	116%
Other assets	7,552	–3%	10%	2,221	13%	–17%
Total assets	97,920	–2%	13%	18,872	8%	311%

Note: this table shows changes in foreign and domestic assets before and after Argentina's 2016 tax amnesty. First, columns (1) and (4) report the total amount of domestic and foreign assets declared by wealth taxpayers in 2015. Next, columns (2) and (5) report the percentage change before the amnesty between 2015 and 2014. Finally, columns (3) and (6) report the post-amnesty change between 2016 and 2015. Each row corresponds to a different type of asset. The last row shows the aggregate across categories.

Source: authors' calculations using data from AFIP statistical yearbooks.

Figure 7 shows that the largest *absolute* gain in the amount reported by Argentines to the tax authority came from foreign stocks and investments, bank deposits, and cash holdings. Indeed, the amount of declared foreign stocks is striking: more than Arg\$400 billion or US\$30 billion were disclosed to the authorities, equivalent to 9.9 per cent of GDP in 2016.⁷ Likewise, more than Arg\$360 billion or US\$25 billion deposited in foreign bank accounts were declared in wealth tax returns after the amnesty. To our knowledge, no other tax amnesty—either attempted by any other administration in Argentina or another country—has achieved this amount of revelations.

Many of these assets were hiding in countries historically considered tax havens or low-tax jurisdictions, such as Switzerland, the British Virgin Islands, and Uruguay. Nevertheless, a meaningful share—30 per cent of foreign stocks, 45 per cent of foreign bank accounts, and 37 per cent of foreign real estate—were located in the United States (Figure A10).⁸

3.2 Disclosures by top wealth groups and progressivity

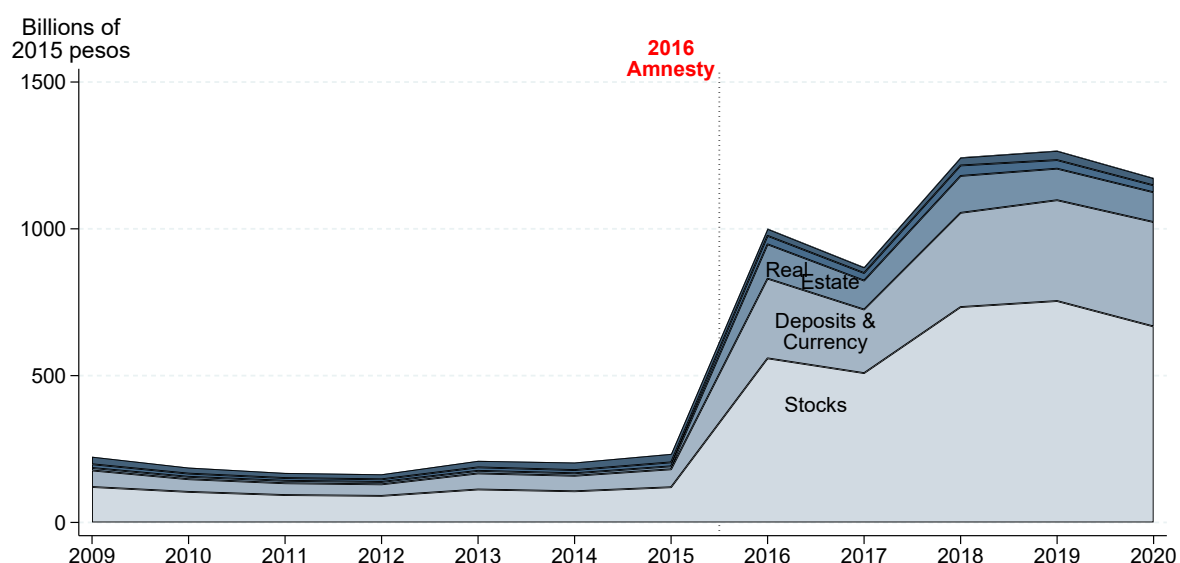
Wealth disclosures might have important implications for the progressivity of the tax system if evasion is concentrated at the top. To examine this possibility, we characterize the wealth distribution and compare the average assets owned by the wealthiest Argentines over time. Specifically, we rank individuals based on their declared assets each year (thus, the groups refer to different people every year) and compare each group's average reported assets before and after the amnesty programme. To examine the extreme right tail of the distribution, we decompose the top 2 per cent into bins of increasing assets all the way to the top 0.01 per cent: P98–P99, P99–P99.5, P99.5–P99.9, P99.9–P99.95, P99.95–P99.99, and P99.99. We use the *gpinter* interface for Pareto interpolations developed by Blanchet et al. (2022), which flexibly recovers a continuous distribution based Argentina's tabulations.

⁷ These values, expressed in constant 2015 pesos, are roughly equivalent to Arg\$755 billion or US\$50 billion in 2016 pesos, which is closer to the official number reported by AFIP (Table A2). Unlike the AFIP reports, our data is based on wealth tax filers. Since people below the wealth tax filing threshold can also disclose assets, our results are lower-bound estimates of overall disclosures.

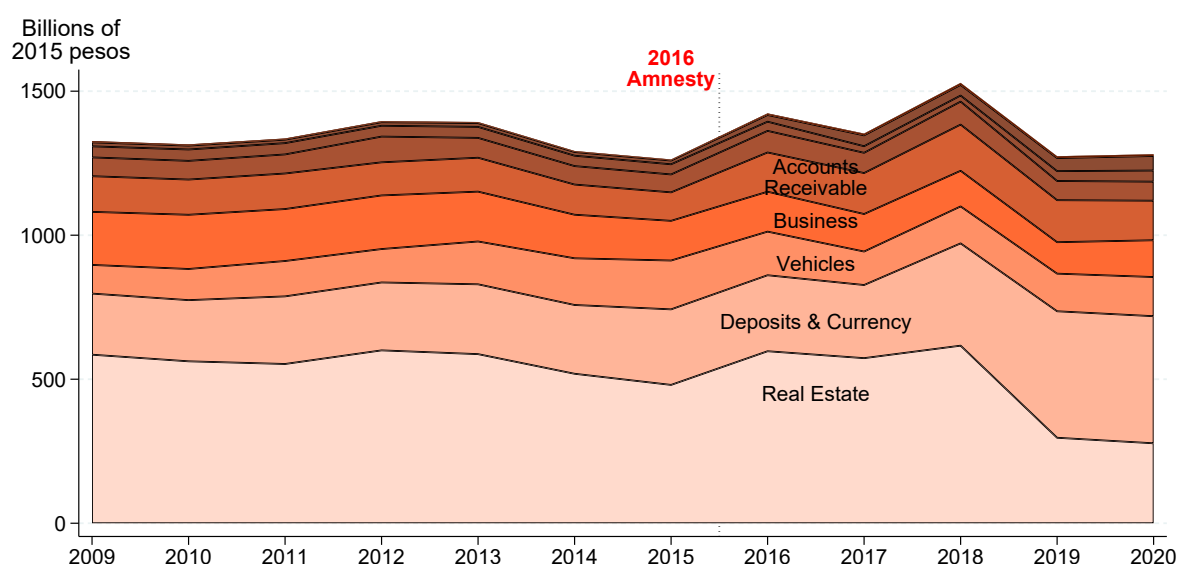
⁸ Moreover, there is evidence that evaders are sensitive to penalty rates: most disclosures of assets took place in December 2016, before the highest penalty fee would increase from 10 to 15 per cent (Figure A11).

Figure 7: The real value of declared foreign or domestic assets by asset type

(a) Foreign assets



(b) Domestic assets



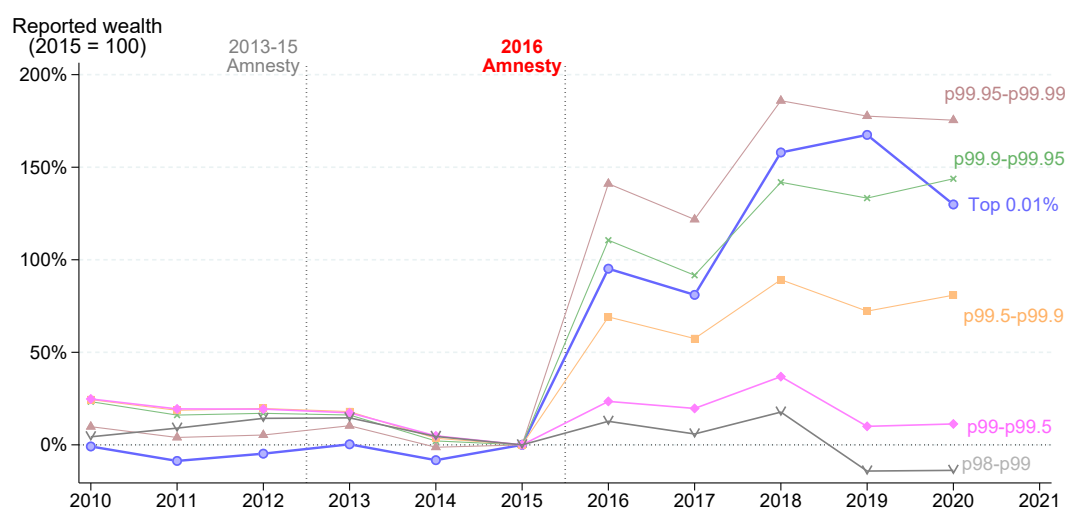
Note: this figure plots the absolute value of the different types of foreign or domestic assets reported by taxpayers in panels (a) and (b), respectively, in constant 2015 pesos (billions). More than Arg\$400 billion (US\$30 billion) of foreign equities were disclosed to the authorities, equivalent to 9.9 per cent of GDP in 2016. Likewise, more than Arg\$360 billion or US\$25 billion deposited in foreign bank accounts were reported in tax returns after the amnesty. Panel (b) shows a drop in domestic real estate after the 2019 reform created a separate wealth tax exemption threshold for primary residences, nine times larger than the threshold for all other assets.

Source: authors' calculations using data from AFIP statistical yearbooks.

Figure 8 and Table 3 compare the assets reported yearly by the wealthiest 2 per cent of tax units—defined as individuals aged 20 and above—separately by bins of increasing assets. Individuals below the top 1 per cent had a moderate 13 per cent increase in their average assets declared in 2016 relative to 2015. By contrast, the wealthiest 0.5 per cent of taxpayers declared substantially more capital after the programme. The rise was especially remarkable among the top 0.1 per cent, for their assets more than doubled. Furthermore, their declared assets remained sizeably larger four years after the amnesty, with these individuals reporting to own two to three times as many assets as before the scheme. These results

suggest that the wealthiest Argentines owned most evaded assets and that the programme boosted the assets reported by this wealthy group of individuals.

Figure 8: The increase in reported assets is greater for Argentina's wealthiest 0.1 per cent



Note: this figure compares the assets reported yearly by the wealthiest 2 per cent of adults (aged 20 and above) separately by bins of increasing assets relative to 2015. Individuals below the top 1 per cent had moderate increases in their average assets after the amnesty. By contrast, the wealthiest 0.5 per cent of taxpayers declared substantially more assets after the programme. In particular, the rise was remarkable among the top 0.1 per cent who, three years after the amnesty, reported to own two to three times as much assets as before the scheme.

Source: authors' calculations using data from AFIP statistical yearbooks.

Table 3: Reported assets by the wealthiest 2 per cent in 2015 and 2016

	Average reported assets (in 2015 US dollars)		%Δ
	2015	2016	
p98-p99	62,283	70,208	13%
p99-p99.5	121,491	150,029	23%
p99.5-p99.9	304,985	515,821	69%
p99.9-p99.95	586,091	1,234,090	111%
p99.95-p99.99	1,455,901	3,510,129	141%
p99.99-p100 (top 0.01%)	8,097,634	15,804,161	95%

Note: this table compares the average assets (in 2015 US dollars) reported by the wealthiest 2 per cent of tax units (individuals aged 20 and above) in 2015 and 2016. The table decomposes the top 2 per cent into bins of increasing assets all the way to the top 0.01 per cent. Individuals below the top 1 per cent had moderate increases in their average assets after the 2016 amnesty. By contrast, the wealthiest 0.5 per cent of taxpayers declared substantially more assets after the programme. The number of tax units is 28,764,680 in 2015 and 29,164,076 in 2016.

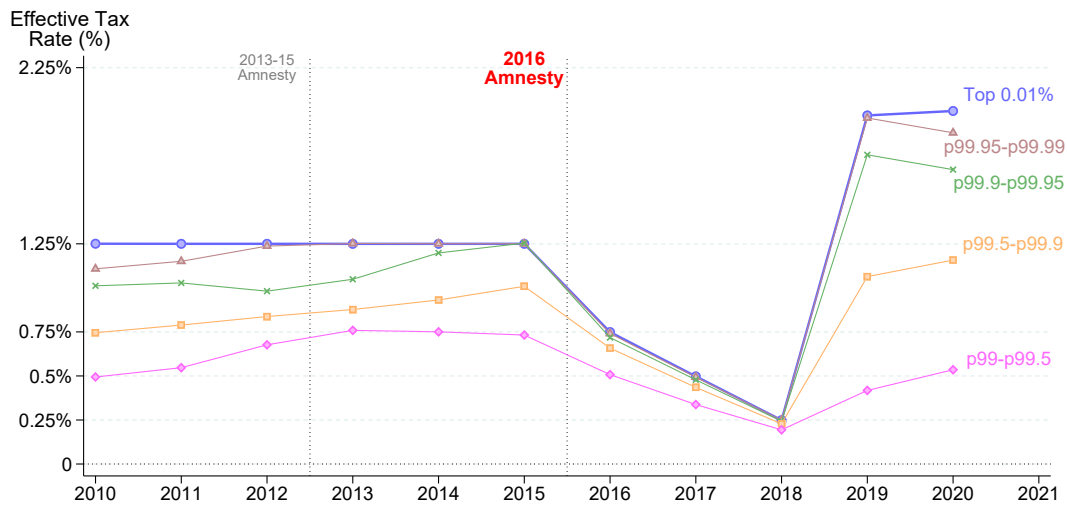
Source: authors' calculations using data from AFIP statistical yearbooks.

Next, we compare high-net-worth individuals' foreign and domestic assets before and after the amnesty. Figure A12 compares the likelihood of reporting a foreign asset and the share of foreign assets declared by the top fractile groups, decomposing the top 1 per cent of the distribution into bins of increasing assets.⁹ High-net-worth individuals hold most of their wealth offshore: three-quarters of individuals in the top 0.01 per cent reported a foreign asset before the amnesty, and their foreign assets comprised over two-thirds of all their assets. Moreover, after the amnesty, virtually all individuals in this group reported owning foreign assets, and foreign assets rose to four-fifths of all assets. Furthermore, a minority of individuals in the next 0.09 per cent declared their foreign assets to Argentine authorities before the

⁹ Argentina's wealth tabulations rank individuals based on total assets. To recover the share of foreign assets (and the effective tax rate) for each fractile, we cumulate the amount of foreign assets (and wealth taxes) by total assets, interpolate the cumulative function for each fractile with a smooth cubic spline function, and differentiate the interpolated function. Reassuringly, a linear interpolation delivers virtually the same results.

amnesty, so they experienced the largest increases in foreign asset disclosures. In all, the amnesty tripled the share of foreign assets declared by the top 0.1 per cent.

Figure 9: An increase in the progressivity of the wealth tax in 2019



Note: this figure compares the wealth tax liability expressed as a share of total (taxable and non-taxable) assets by the wealthiest 1 per cent of adults (aged 20 and above) separately by bins of increasing assets. The progressivity of the wealth tax increased in 2019 when Argentina taxed offshore assets at higher rates.

Source: authors' calculations using data from AFIP statistical yearbooks.

Having achieved massive disclosures of foreign assets, Argentina sought to raise revenue by levying high taxes on offshore wealth in 2019. Levying higher taxes on foreign assets has implications for the progressivity of the tax system because the wealthiest Argentines own most foreign assets. To examine changes in tax progressivity, Figure 9 plots the effective wealth rate between 2010 and 2020 by bins of increasing fortune. The wealthiest 0.01 per cent experienced an eightfold increase in their effective tax rate, which jumped from 0.25 per cent in 2018 to 2 per cent in 2019. Similarly, the effective tax rate increased significantly for the next 0.09 per cent. Furthermore, as the following sections will show, most Argentines chose to pay the tax and keep their assets abroad despite the heftier rates, making Argentina's wealth tax one of the world's most successful in terms of revenue.

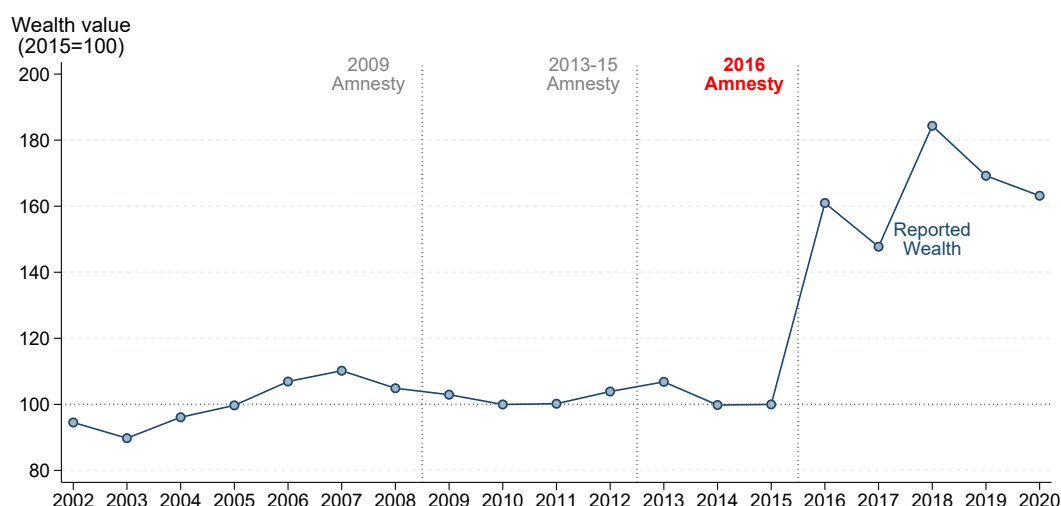
3.3 Expanding the wealth and capital income tax bases

The above results showed that the 2016 amnesty revealed substantial assets held by Argentines domestically and offshore. This section shows that, as a result, the amnesty dramatically expanded Argentina's wealth and capital income tax bases.

Figure 10 plots the total value of wealth reported by wealth tax filers in constant 2015 pesos. Total declared wealth increased by 60 per cent in 2016 compared to 2015, from Arg\$1,500 billion to Arg\$2,400 billion (Figure A13) or from US\$116 billion to US\$186 billion using the market exchange rate (Figure A14). Moreover, declared wealth remained more than 60 per cent greater four years later. Arguably, once a taxpayer discloses an asset to the authorities, it is hard to go back and underreport it.

Ceteris paribus, an expanded tax base will boost the wealth tax revenue. However, Argentina combined the amnesty programme with (1) an exemption of compliant taxpayers from the wealth tax; (2) a progressive reduction of wealth tax rates; (3) a switch from average to marginal rates; and (4) higher filing thresholds. Therefore, we simulate the counterfactual revenue authorities would have mechanically collected without the amnesty to examine this effect.

Figure 10: The 2016 amnesty raised the total value of wealth reported by tax filers



Note: this figure plots the total value of wealth reported by tax filers in constant 2015 pesos (2015 = 100). Total declared wealth increased by 60 per cent in 2016 compared to 2015 (or from US\$116 billion to US\$186 billion using the market exchange rate of Arg\$12.9 pesos to US\$1 in December 2015). Moreover, declared wealth remained 70 per cent greater three years later. Source: authors' calculations using data from AFIP statistical yearbooks.

Our simulation assumes that, first, declared wealth would have remained the same in constant pesos in 2016 as in 2015, absent the amnesty. This assumption is plausible, as Figure 10 shows that the stock of reported wealth evolved stably in the 14 years before the 2016 amnesty. Next, we compute the 2016 wealth tax base, defined as wealth exceeding the exemption threshold, by subtracting 2016's new exemption threshold of Arg\$800,000 from the simulated amount of reported wealth. Lastly, we multiply the simulated wealth tax base by the 2016 wealth tax rate of 0.75 per cent to obtain the counterfactual wealth tax revenue. We performed a similar procedure for 2017 and 2018, when the tax rate was 0.5 per cent and 0.25 per cent, respectively.¹⁰

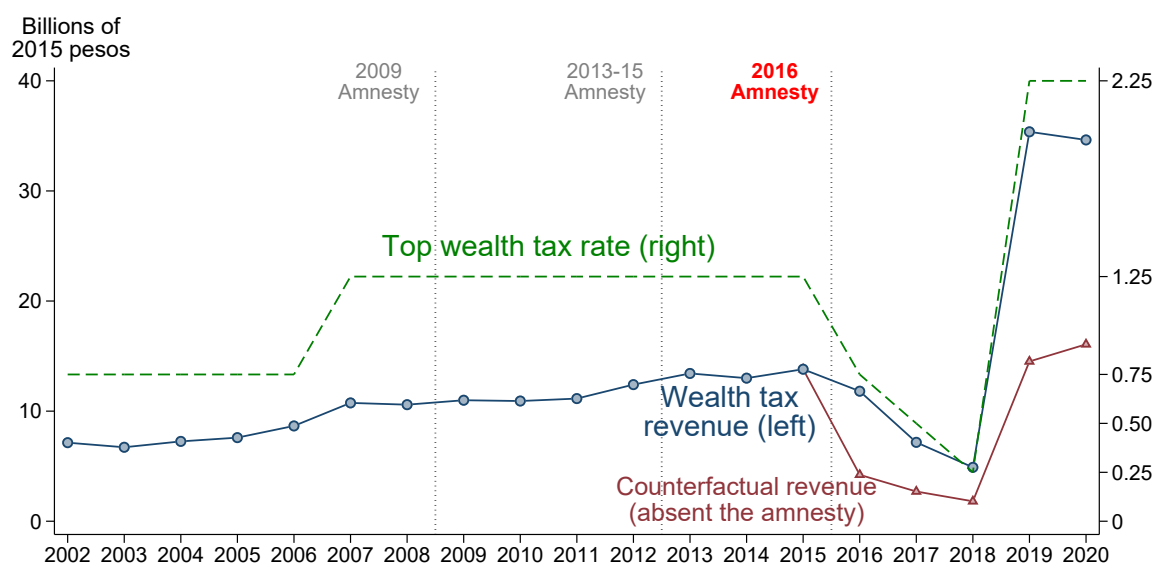
Figure 11 suggests that Argentina's amnesty more than doubled the wealth tax revenue by 165–180 per cent from 2016 to 2018. Moreover, the expanded tax base enabled the government to raise more revenue in 2019 by increasing the wealth tax rates and levying an exceptionally high rate of 2.25 per cent on foreign assets. In December 2018 the Macri administration reneged on its promise to abolish the wealth tax. The following year, the new Fernández administration increased the top wealth tax rate to 1.25 per cent and 2.25 per cent for domestic and foreign assets, respectively, and generated separate tax schedules depending on the location of the asset (Figure 2).¹¹ As a result, the average effective wealth tax rate increased from 0.25 per cent in 2018 to 1.46 per cent in 2019 (Figure A15). Consequently, Figure 11 shows that the wealth tax revenue increased more than seven-fold from Arg\$4.9 billion in 2018 to Arg\$35.4 billion in 2019, or from 0.14 per cent of GDP to 0.75 per cent of GDP (Figure A16), making Argentina's wealth tax one of the most successful in terms of tax revenue.

Relative to the counterfactual tax revenue in 2019, the amnesty raised revenue more than three-fold thanks to the prominent disclosures of offshore wealth it induced.

¹⁰We ignore taxpayers responding to the change in the wealth tax rates by changing their reported wealth. If taxpayers respond to the reduced tax rates of 2016, 2017, and 2018 by reporting more wealth, this could confound part of the revenue effect. Similarly, the wealth tax hike in 2019 might induce some taxpayers to report less wealth, meaning tax revenue would have been higher absent the tax change.

¹¹To simulate the counterfactual tax revenue absent the amnesty in that year, we assume that all domestic and foreign assets faced the top tax rates. This assumption is conservative because, in practice, many smaller assets faced lower tax rates, making our counterfactual revenue an upper bound and, correspondingly, our estimated revenue gain a lower bound.

Figure 11: The 2016 amnesty raised the wealth tax revenue



Note: this figure plots the wealth tax revenue and the counterfactual revenue absent the tax amnesty (left axis) as well as the top wealth tax rate (right axis). Argentina's amnesty more than doubled the wealth tax revenue by 165–180 per cent from 2016 to 2018. Moreover, the wealth tax revenue increased more than seven-fold from Arg\$4.9 billion in 2018 to Arg\$35.4 billion in 2019, after the 2019 reform increased the wealth tax rates. Relative to the counterfactual revenue in 2019, the amnesty raised tax revenue more than three-fold thanks to the prominent disclosures of offshore wealth it induced. Source: authors' calculations using data from AFIP statistical yearbooks.

In addition, the improved wealth tax compliance caused by the amnesty could encourage disclosers of hidden assets to declare the *return* of their assets, boosting taxable income. To measure the effect on capital income tax compliance, we turn to the data from the income tax. Figure 12 compares the number of taxpayers who report some capital income (panel (a)) and their amount of reported capital income (panel (b)). There is no change in the series before the 2016 amnesty, followed by a meaningful increase in reported capital income starting in 2016—when disclosers were required to register income.

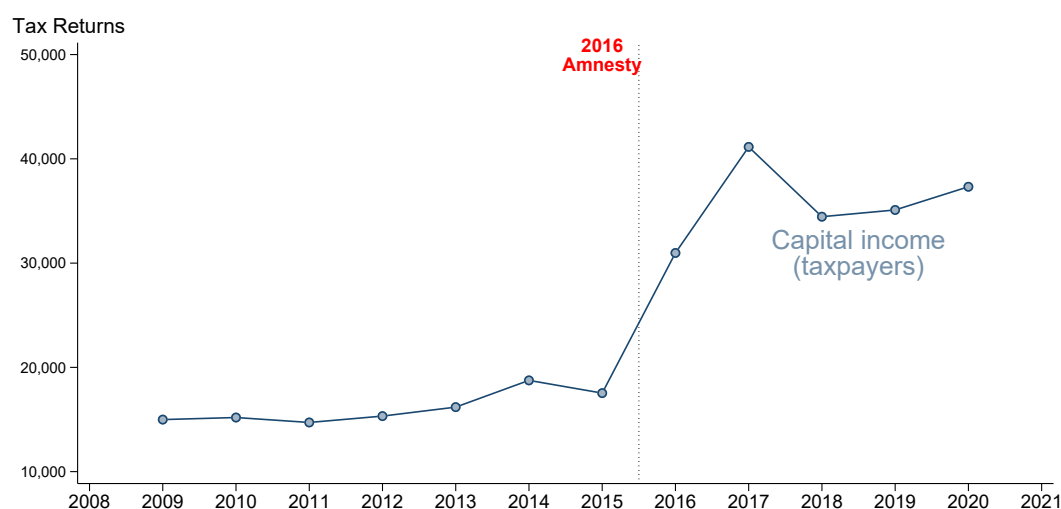
Specifically, the number of taxpayers reporting some capital income doubled, and the capital income tax base tripled after the amnesty. By contrast, Figure 12(b) shows that none of the other three sources of income—namely wage, rental, or business income—changed after the amnesty. These patterns are consistent with foreign and domestic assets, which generated taxable income and were left undeclared before the amnesty, becoming more truthfully reported after the programme. Critically, again, these improvements persisted years after the amnesty programme ended.

Lastly, the increased reported wealth tax compliance was timely as the COVID-19 crisis struck in 2020, enabling the government to raise revenue progressively. The government used progressive wealth taxation to finance health expenses and expand the social safety net, levying a one-time wealth tax surcharge on the wealthiest 12,500 Argentines with assets worth more than Arg\$200 million or US\$2.4 million (Law 27.605). The marginal tax rates ranged from 2 per cent to 3.5 per cent for domestic assets and 3 per cent to 5.25 per cent for foreign assets. Official reports from AFIP informed that 10,000 people paid the tax by April 2021 with approximately US\$80 billion in taxable assets, of which 50 per cent were located abroad.¹²

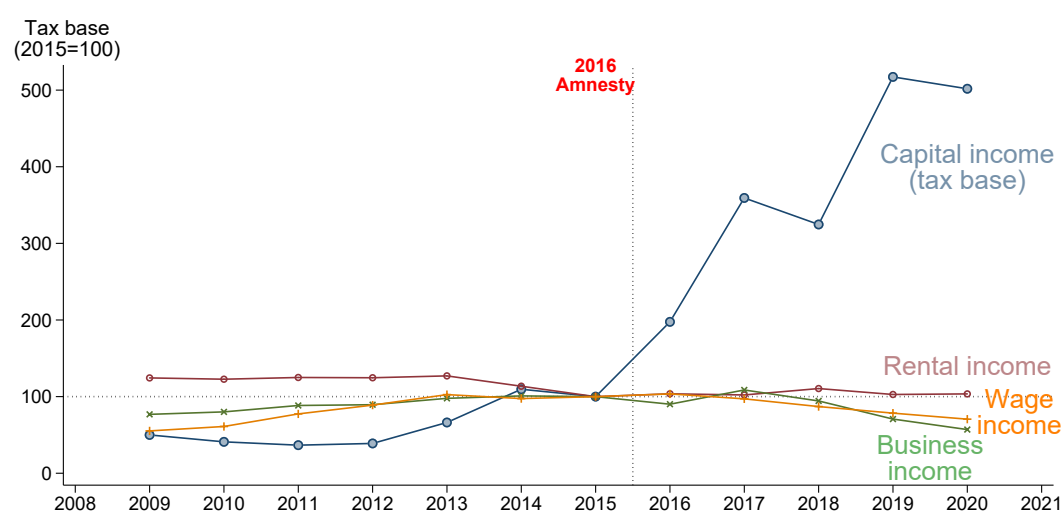
¹² The remaining 2,500 non-filers were actively audited by the tax authority and threatened with prosecution. About 1,100 taxpayers filed a lawsuit against the government and are currently being treated in court (<https://www.telam.com.ar/notas/202112/577043-afip-aporte-solidario-extraordinario-recaudacion.html>).

Figure 12: The 2016 amnesty raised capital income tax revenue

(a) Number of taxpayers subject to capital income tax



(b) Capital income tax base



Note: this figure shows how the 2016 amnesty raised capital income tax revenue by comparing the number of taxpayers subject to the capital income tax and the capital income tax base in panels (a) and (b), respectively. There is a meaningful increase in reported capital income starting in 2016, when disclosers are required to register income: the number of taxpayers reporting some capital income doubled and the capital income tax base tripled. By contrast, none of the other three sources of income (wage income, business income, rental income) changed after the amnesty. These patterns are consistent with foreign and domestic assets, which generated taxable income and were left undeclared before the amnesty, becoming more truthfully reported after the programme. Critically, these improvements persisted years after the amnesty programme ended. Source: authors' calculations using data from AFIP statistical yearbooks.

This value is more than twice the US\$30 billion tax base declared by the wealthiest 11,700 Argentines before the amnesty, based on our tabulations. As a result, the government collected US\$2.8 billion in revenue, roughly equivalent to one month of Argentina's value-added tax, the country's largest revenue source (AFIP 2021).

3.4 Increasing transfers by earmarking revenue for pension spending

As explained in Section 2, Argentina earmarked the revenue from the 2016 amnesty programme's 'special tax' to fund the public pension system, including reparations to pensioners for unpaid benefits and

an increase in some existing benefits. In this section, we show that earmarking resulted in higher pension benefits for the elderly.

We leverage two institutional features to examine the effect of the tax amnesty on pension payouts. First, the reparations programme aimed to raise pensions for those contributing for at least 30 years, who are eligible to receive a monthly pension benefit (based on pre-retirement income) in addition to Argentina's monthly minimum pension benefit. By contrast, the reparations programme should not affect the minimum monthly pension received by the roughly 2.5 million individuals—one in two older citizens—who contribute for fewer than 30 years (Berniell et al. 2020; Bosch and Guajardo 2012; Rottenschweiler 2020). Therefore, the average pension of retirees earning more than the minimum is potentially affected by the policy (treated), while the monthly minimum pension is not (control). Second, Argentina adopted the amnesty law in June 2016, and the Social Security Administration (SSA) began accepting reparation applications from retirees three months later. Therefore, we should expect the programme to increase pension payouts starting in September 2016.

Figure 13 shows how retirees' pension benefits evolve before and after the amnesty programme. Panel (a) compares the minimum pension benefit (control) and the average pension above the minimum benefit (treated) before and after the adoption of the amnesty law in June 2016. Both series are expressed in constant 2015 pesos and normalized to 1 in December 2015. The two series evolve identically before the amnesty and then diverge, with the average pension substantially increasing after September 2016, when the SSA began accepting applications for pension reparations. Over 603,000 pensioners applied for reparations that month. The number of applicants doubled by November 2017 and stabilized at around 1.2 million. As a result, Figure 13(b), which reports the difference-in-difference (DD) coefficient, shows that the difference between the two series stabilizes at around 15 per cent.¹³ In addition, Figure 13(b) superimposes the total monthly reparation spending based on official SSA reports. The series aligns closely with the DD coefficient, consistent with the amnesty programme causally increasing reparation spending on pension benefits.¹⁴ In sum, by earmarking the revenue from the amnesty for Argentina's pension reparations programme, the average pension received by retirees increased by 15 per cent.

3.5 Do taxpayers repatriate assets in response to tax incentives?

This section presents several pieces of evidence suggesting taxpayers do not repatriate their foreign assets in response to tax incentives.

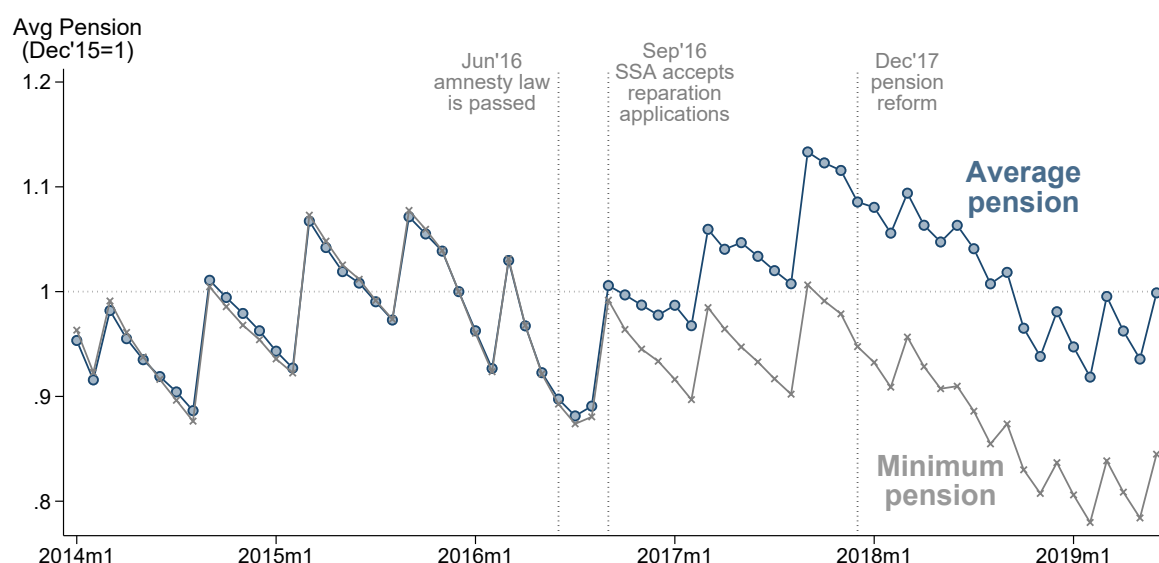
First, the 2013–15 amnesty encouraged repatriation by waiving the participation fee for participants who disclosed foreign currencies and deposits and invested them in three Treasury securities. Because Treasury securities are exempt from Argentina's wealth tax, the waived penalty generated a sizeable tax benefit for repatriation. Notwithstanding, the amount invested in Treasury securities during the 2013–15 amnesty represented only 0.5 per cent of GDP (Table 1). In fact, 12 times less currency and fewer deposits were disclosed during this amnesty than during the 2016 scheme, despite being only a couple of months apart. Later, participants of the 2016 amnesty could also waive the penalty by investing one-third of their disclosed assets in two Treasury bonds or domestic mutual funds. However, again, most Argentine evaders chose to pay the special tax and keep their assets abroad, as the head of AFIP himself later acknowledged to the press (Clarín 2017). Thus, the repatriation clauses included in Argentina's

¹³ In December 2017, Argentina introduced a new pension reform. Among other things, this reform revised the pension indexation formula used to calculate increases in pension benefits. As shown by the pension benefits' step function growth in Figure 13, the indexation system was based on semi-annual adjustments (based on growth in wages and taxes). By contrast, the 2017 reform based the system on quarterly adjustments (based on wage and price inflation).

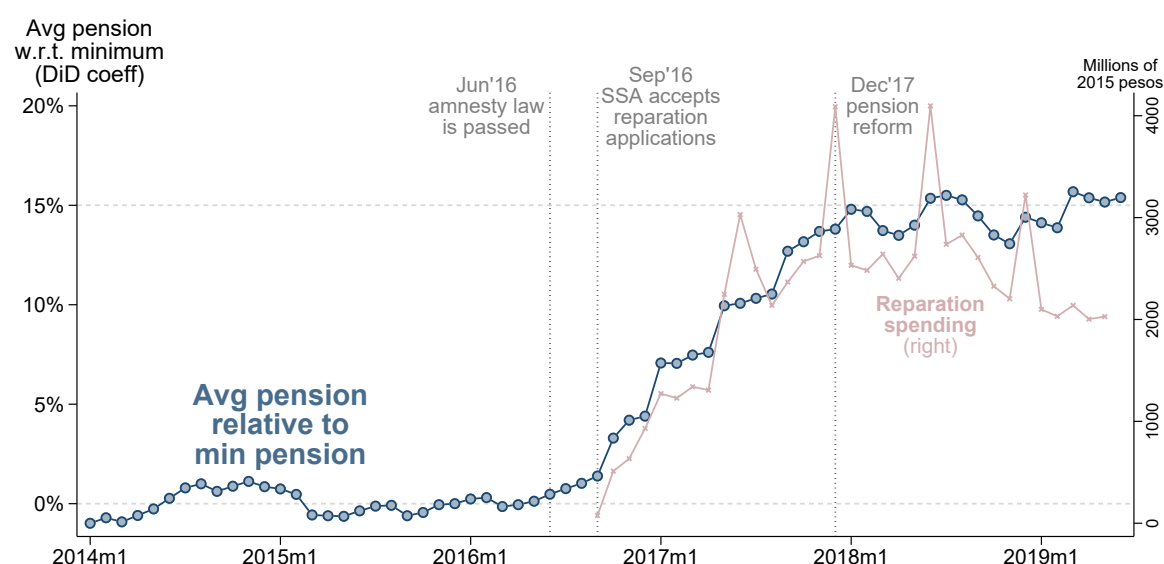
¹⁴ Figure A17 plots the evolution of average pension benefits above and below the median benefit. Since one-half of retirees receive the statutory minimum pension, they do not experience any change in their pension benefits after the amnesty.

Figure 13: Earmarking amnesty revenue to fund retirees

(a) Average and minimum pension benefits



(b) The difference between average and minimum pension and reparation spending



Note: this figure plots retirees' pension benefits before and after the 2016 amnesty programme. Panel (a) compares the minimum pension benefit (control) and the average pension above the minimum benefit (treated). The series are expressed in constant 2015 pesos and normalized to 1 in December 2015. The average pension substantially increased after September 2016, when the SSA began accepting applications for reparations. The number of reparation applicants stabilized at approximately 1.2 million by November 2017. As a result, panel (b), which plots the DD coefficient (left axis) against the amount spent on Argentina's pension reparations programme (right axis), shows that the difference between the two series also stabilizes at around 15 per cent. Pension reparations spending increases after September 2016 and aligns closely with the DD coefficient.

Source: authors' calculations using data from ANSES.

tax amnesties to entice evaders to bring capital back into the country do not seem to have achieved their objective.

Second, Argentines do not seem eager to repatriate their assets even after the government raised the tax rates on foreign assets in 2019. That year, Argentina increased the top wealth tax rate to 2.25 per cent—the highest tax rate in the last three decades (Figure 2). By contrast, domestic assets were levied

with a lower top rate of 1.25 per cent, generating a differential tax treatment depending on the location of the asset and a solid incentive to repatriate capital to alleviate the wealth tax burden. Furthermore, Argentina awarded an additional tax incentive for taxpayers to repatriate: individuals repatriating 5 per cent or more of their foreign assets would face the (lower) domestic wealth tax rate for *all* of their assets.

If Argentine taxpayers responded to these strong tax incentives to repatriate capital, we would observe a drop in foreign assets, a corresponding increase in domestic assets, and a decrease in the average effective tax rate after 2019. However, the amount of foreign and domestic assets barely changed in 2019 and 2020 compared to 2018 (Figure 4). Moreover, the average effective tax rate remained similar in 2020 relative to 2019 (Figure A15). These results hold throughout the distribution of assets: both the share of foreign assets and the effective tax rate remained constant for the wealthiest 1 per cent (Figures 9 and A12). While this evidence does not entirely rule out that taxpayers respond to tax incentives favouring repatriation, our data suggest that the short-term response is not quantitatively meaningful. As a result, the Argentine wealth tax's effective tax rate and collected revenue skyrocketed after 2019 (Figures A15 and A16).

Why do wealthy Argentines prefer to pay a hefty wealth tax and keep their assets abroad? Given the seemingly negligible repatriation response to taxes, we posit that tax incentives cannot explain why Argentines have offshore assets. Instead, wealthy Argentines might keep their assets offshore because this allows them to insure themselves against economic volatility, currency controls, high exchange rate fluctuations, and inflation spells. In addition, foreign assets might enable Argentines to access financial services they cannot get in Argentina and, presumably, obtain higher (pre-tax) returns.

4 Discussion

This section discusses the policy design and contextual features of Argentina's 2016 amnesty programme compared with previous programmes. We leverage the rich policy variation from Argentina's multiple amnesties to examine the role of the scheme's tax and non-tax features, such as how salient the programme is and how credible is the threat of detection. The ideal policy experiment would randomize such features in a randomized control experiment to estimate their causal effect. However, alas, this is politically unfeasible. Notwithstanding, given that Argentina has implemented multiple amnesties with different designs and varying degrees of success, the experience from Argentina might help other governments draw some lessons about the conditions under which an amnesty programme can achieve its goals.

The tax incentives. In establishing a voluntary disclosure programme, tax administrations typically offer tax benefits to entice evaders to come forward. However, these tax incentives must be designed to avoid negatively impacting existing levels of compliance. For example, if there is a perception that evaders can secure terms through these programmes that leave them better off than honest taxpayers, this may unintentionally increase non-compliance (Langenmayr 2017; OECD 2015).

Argentina's 2016 amnesty combined generous tax incentives to encourage participation while retaining the support and compliance of honest taxpayers. On the one hand, the law contained a gradual wealth tax reduction and the draft bill even discussed its abolition from January 2019 onward, enticing evaders to participate because doing so would not offset their future wealth tax obligations. At the time, the government's commitment to reduce and eventually abolish wealth taxation seemed credible: Macri represented a new and pro-market government, widely accepted by Argentina's elite, who benefited from the amnesty programme. On the other hand, the amnesty programme levied the highest penalty rate: up to 15 per cent compared to only 8 per cent in 2009 and 0 per cent in 2013–15 (Table 1). Furthermore, the

government explicitly rewarded compliant wealth tax payers by exempting those who did not participate in the amnesty from the wealth tax in 2016, 2017, and 2018 (called the ‘good complier’ benefit). The combination of these two features may have resulted in high participation without eroding compliance of non-evaders.

The threat of detection. Tax evaders are more willing to comply if they perceive they will likely get caught cheating. However, this probability depends on whether a tax authority can detect offshore evasion. Automatic TIEAs can improve detection and, as a result, make the threat of detection more credible. Indeed, many governments have implemented voluntary disclosure programmes to take advantage of the momentum given by the availability of information about financial accounts held abroad and increased cooperation between tax authorities (OECD 2015).

Arguably, the threat of detection was not credible when Argentina implemented its amnesties in 2009 and 2013–15: the country had not signed TIEAs before 2014, leaving authorities largely unable to catch cheaters. In contrast, this changed by the time the 2016 amnesty came around. First, in October 2014, Argentina participated in the OECD Automatic Exchange of Information and committed to exchanging information by September 2017. Second, in 2016, Argentina signed TIEAs with one of its most relevant tax havens, Uruguay, as well as many other countries, including the United States, Chile, Switzerland, and Brazil. These advances were integral to the tax authority’s communication campaign to encourage participation in the 2016 amnesty programme. Indeed, several years later, the media reported how the TIEAs were used to enforce taxes (La Nacion 2021). Furthermore, the Panama Papers were leaked four months before the amnesty began, which, as shown by Londoño-Vélez and Ávila-Mahecha (2021), further raised the perceived threat of detection. Taken together, these factors likely led to a greater perception that the loopholes enabling evasion were narrower in 2016 than in previous years.

A favourable political economy. Political alignment and attitudes towards government can influence taxpayers’ decisions to evade taxes (Cullen et al. 2021). Argentines’ confidence in the left-wing government of Fernández de Kirchner was low during the 2009 and 2013–15 amnesties. Figure A18 plots the national governance index, which measures citizens’ trust in the government and ranges from 0 (low) to 5 (high). There is a discrete jump in the confidence index as soon as Macri takes office. Moreover, confidence remained high when Macri implemented the amnesty programme shortly after. Unlike his predecessor, a programme implemented by a pro-market and business-friendly president may have encouraged wealthy Argentines to come forward.¹⁵

In addition, Argentina used the amnesty programme to generate revenue to fund an increase in the pensions of older citizens; the law earmarked revenue from the amnesty’s ‘special tax’ to fund these retirees. Indeed, the government promoted this as part of its campaign to encourage evaders to come forward, presenting the amnesty as a way that people could contribute to better pension benefits for senior citizens (as an illustration, Figure A5 reproduces an advert used by AFIP for this purpose). As a result, earmarking may have generated taxpayer support for the amnesty programme.

High salience and low compliance costs. Argentina sought to encourage participation thanks to a massive information campaign promoting participation in the tax amnesty. Moreover, authorities considerably simplified the disclosure procedure to make it easy for people to come forward. For instance, they published step-by-step guidelines on how to participate, posted tutorial videos on YouTube, and created an app to calculate the participation tax penalty (Figure A6). This may have contributed to high participation.

¹⁵ An example of Macri’s pro-market stance is that he lifted Argentina’s foreign exchange controls as soon as he took office in December 2015. These controls, established by Fernández de Kirchner in 2011, limited Argentines’ ability to buy or sell foreign currency. Opposing the Kirchners, Macri campaigned on the promise that he would cancel the restrictions immediately as part of the reforms to promote economic growth.

In sum, Argentina's 2016 amnesty was likely successful thanks to well-designed tax incentives, a credible threat of detection, a favourable political economy, and a massive advertising campaign.

5 Conclusion

We find that Argentina's most recent tax amnesty in 2016 had unprecedented success in encouraging taxpayers—especially those in the wealthiest 0.1 per cent of the wealth distribution—to reveal their assets hidden offshore. Moreover, the enforcement effect is sizeable relative to independent estimates of the amount of concealed offshore wealth and capital income overall (Alstadsater et al. 2018; Zucman 2013). Consequently, the programme improved the progressivity of Argentina's wealth tax, expanded the country's wealth and capital income tax bases, and raised revenue from taxes on capital. In addition, by earmarking revenue, the improved enforcement funded a pension reparations programme that raised benefits for older citizens.

Do our findings apply to other countries? We certainly do not claim that Argentina's success can be replicated everywhere—even by a future Argentine administration. Admittedly, Argentina has some unique features, starting with a large stock of offshore wealth. Notwithstanding, its varied experiences with tax amnesties can offer valuable lessons for other countries. Amnesties seem to be most effective when combined with well-designed tax benefits for compliant and non-compliant taxpayers, credible detection and punishment threats for non-participating evaders, substantial advertisement campaigns, strong confidence in the incumbent government, and, perhaps, earmarking revenue for taxpayer support.

Lastly, Argentina has recently moved to impose very high taxes on foreign assets to encourage people to invest capital in the country. While our data suggests negligible repatriation responses in the short term, repatriation could take longer to respond. Thus, further research should examine whether Argentines will bring capital back in the subsequent years.

References

- AFIP (2017). 'Sinceramiento Fiscal: Cierre'. Presentation. Available at: <https://cpcecba.org.ar/media/download/noticias/Sinceramiento.pdf> (accessed 11 September 2021).
- AFIP (2021). Government database. Available at: <https://contenidos.afip.gob.ar/institucional/estudios/archivos/serie2021.xls> (accessed 11 September 2021).
- Alstadsater, A., N. Johannesen, S.L.G. Henry, and G. Zucman (2022). 'Tax Evasion and Tax Avoidance'. *Journal of Public Economics*, 206: 104587. <https://doi.org/10.1016/j.jpubeco.2021.104587>
- Alstadsater, A., N. Johannesen, and G. Zucman (2018). 'Who Owns the Wealth in Tax Havens? Macro Evidence and Implications for Global Inequality'. *Journal of Public Economics*, 162: 89–100. <https://doi.org/10.1016/j.jpubeco.2018.01.008>
- Alstadsater, A., N. Johannesen, and G. Zucman (2019). 'Tax Evasion and Inequality'. *American Economic Review*, 109(6): 2073–103. <https://doi.org/10.1257/aer.20172043>
- Berniell, I., D. de la Mata, and M.P. Machado (2020). 'The Impact of a Permanent Income Shock on the Situation of Women in the Household: The Case of a Pension Reform in Argentina'. *Economic Development and Cultural Change*, 68(4): 1295–343. <https://doi.org/10.1086/702792>
- Blanchet, T., J. Fournier, and T. Piketty (2022). 'Generalized Pareto Curves: Theory and Applications'. *Review of Income and Wealth*, 68(1): 263–88. <https://doi.org/10.1111/roiw.12510>
- Bosch, M., and J. Guajardo (2012). 'Labor Market Impacts of Non-contributory Pensions: The Case of Argentina's Moratorium'. IDB Working Paper 366. Washington, DC: Inter-American Development Bank.

- Cavallo, A., and M. Bertolotto (2016). ‘Filling the Gap in Argentina’s Inflation Data’. Available at <https://ssrn.com/abstract=2782104> (accessed 13 September 2022).
- Clarín (2017). ‘Balance final Blanquearon 57.000 propiedades en el exterior, la mitad en Uruguay’. Available at: https://www.clarin.com/economia/blanquearon-57-000-propiedades-exterior-mitad-uruguay_0_rkSKb9ZTe.html (accessed 11 September 2022).
- Cullen, J.B., N. Turner, and E. Washington (2021). ‘Political Alignment, Attitudes Toward Government, and Tax Evasion’. *American Economic Journal: Economic Policy*, 13(3): 135–66. <https://doi.org/10.1257/pol.20190409>
- Guyton, J., P. Langetieg, D. Reck, M. Risch, and G. Zucman (2021). ‘Tax Evasion at the Top of the Income Distribution: Theory and Evidence’. Working Paper 28542. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w28542>
- Johannessen, N., P. Langetieg, D. Reck, M. Risch, and J. Slemrod (2020). ‘Taxing Hidden Wealth: The Consequences of U.S. Enforcement Initiatives on Evasive Foreign Accounts’. *American Economic Journal: Economic Policy*, 12(3): 312–46. <https://doi.org/10.1257/pol.20180410>
- La Nación (2021). ‘La AFIP tiene bajo la lupa 3000 cuentas bancarias de argentinos en el exterior’. *LA Nación*. Available at: [LaAFIPtienebajolalupa3000cuentasbancariasdeargentinosenelexterior](https://www.lanacion.com.ar/economia/la-afip-tiene-bajo-la-lupa-3000-cuentas-bancarias-de-argentinos-en-el-exterior-n1.1411111) (accessed 11 September 2021).
- Langenmayr, D. (2017). ‘Voluntary Disclosure of Evaded Taxes: Increasing Revenue, or Increasing Incentives to Evade?’. *Journal of Public Economics*, 171(7): 110–25. <https://doi.org/10.1016/j.jpubeco.2015.08.007>
- Leenders, W., A. Lejour, S. Rabaté, and M. van’t Riet (2021). ‘Offshore Tax Evasion and Wealth Inequality: Evidence from a Tax Amnesty in the Netherlands’. EconPol Working Paper 52/2020. Munich: EconPol. Available at: <https://docs.google.com/viewer?url=https%3A%2F%2Fwouterleenders.eu%2FLeendersetal2021WP.pdf> (accessed 11 September 2022).
- Londoño-Vélez, J., and J. Ávila-Mahecha (2021). ‘Enforcing Wealth Taxes in the Developing World: Quasi-Experimental Evidence from Colombia’. *American Economic Review: Insights*, 3(2): 131–48. <https://doi.org/10.1257/aeri.20200319>
- Ministerio de Economía (2022). ‘Impuesto sobre los Bienes Personales: Evolución de Alícuotas, Mínimos no Imponibles y Mínimo Exento’. Available at: https://docs.google.com/viewer?url=https%3A%2F%2Fwww.argentina.gob.ar%2Fsites%2Fdefault%2Ffiles%2Fimpuesto_sobre_los_bienes_personales_al_14-01-2022_1.pdf (accessed 11 September 2021).
- OECD (2015). *Update on Voluntary Disclosure Programmes: A Pathway to Tax Compliance*. Paris: OECD Publishing.
- Rottenschweiler, S. (2020). ‘Un mismo comienzo y dos caminos dispares: la reparación histórica y la pensión universal para el adulto mayor (2016–2019)’. *Revista Latinoamericana de Desarrollo Económico*, 34: 67–92. <https://doi.org/10.35319/lajed.202034426>
- Slemrod, J. (2019). ‘Tax Compliance and Enforcement’. *Journal of Economic Literature*, 57(4): 904–54. <https://doi.org/10.1257/jel.20181437>
- Sturzenegger, F. (2019). ‘Macri’s Macro: The Elusive Road to Stability and Growth’. *Brookings Papers on Economic Activity*, 2019(2): 339–436. <https://doi.org/10.1353/eca.2019.0016>
- Telam (2016). ‘El sinceramiento fiscal ya alcanza los u\$s 21.863 millones’. Available at: <https://www.telam.com.ar/notas/201611/171267-sinceramiento-fiscal-blanqueo-capiales-afip-alberto-abad.html> (accessed 11 September 2022).
- Tørsløv, T., L. Wier, and G. Zucman (2022). ‘The Missing Profits of Nations’. *The Review of Economic Studies*. <https://doi.org/10.1093/restud/rdac049> <https://doi.org/10.1093/restud/rdac049>
- Zucman, G. (2013). ‘The Missing Wealth of Nations: Are Europe and the U.S. Net Debtors or Net Creditors?’. *Quarterly Journal of Economics*, 128(3): 1321–64. <https://doi.org/10.1093/qje/qjt012>
- Zucman, G. (2015). *The Hidden Wealth of Nations: The Scourge of Tax Havens*. Chicago, IL: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226245560.001.0001>

Appendix A

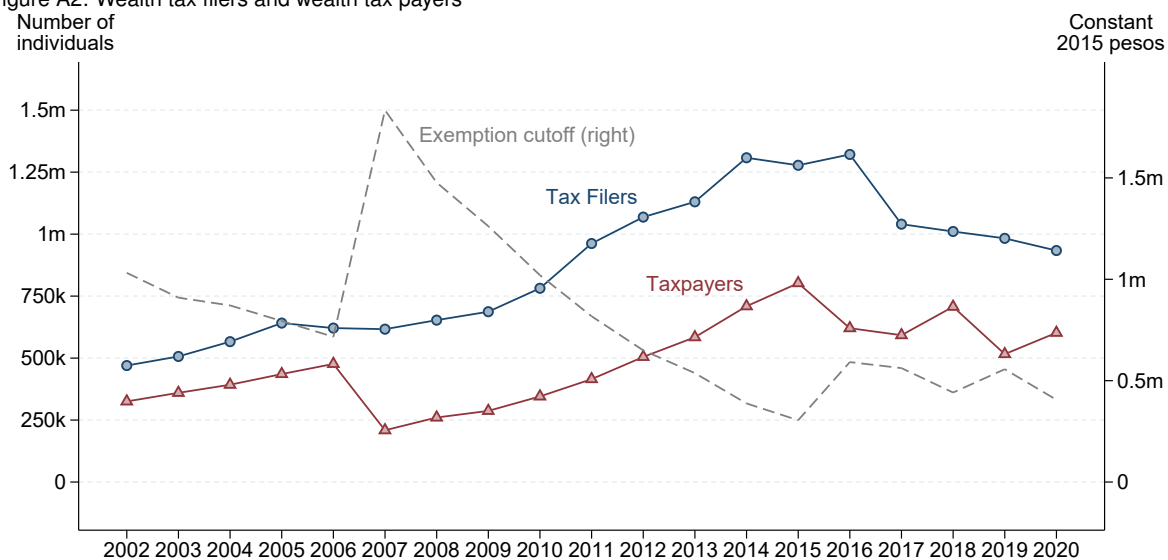
Figure A1: Annual inflation: 2000–17



Note: this figure plots the average annual inflation rate in Argentina between 2000 and 2017.

Source: authors' compilation based on data from the Billion Prices Project at MIT (Cavallo and Bertolotto 2016).

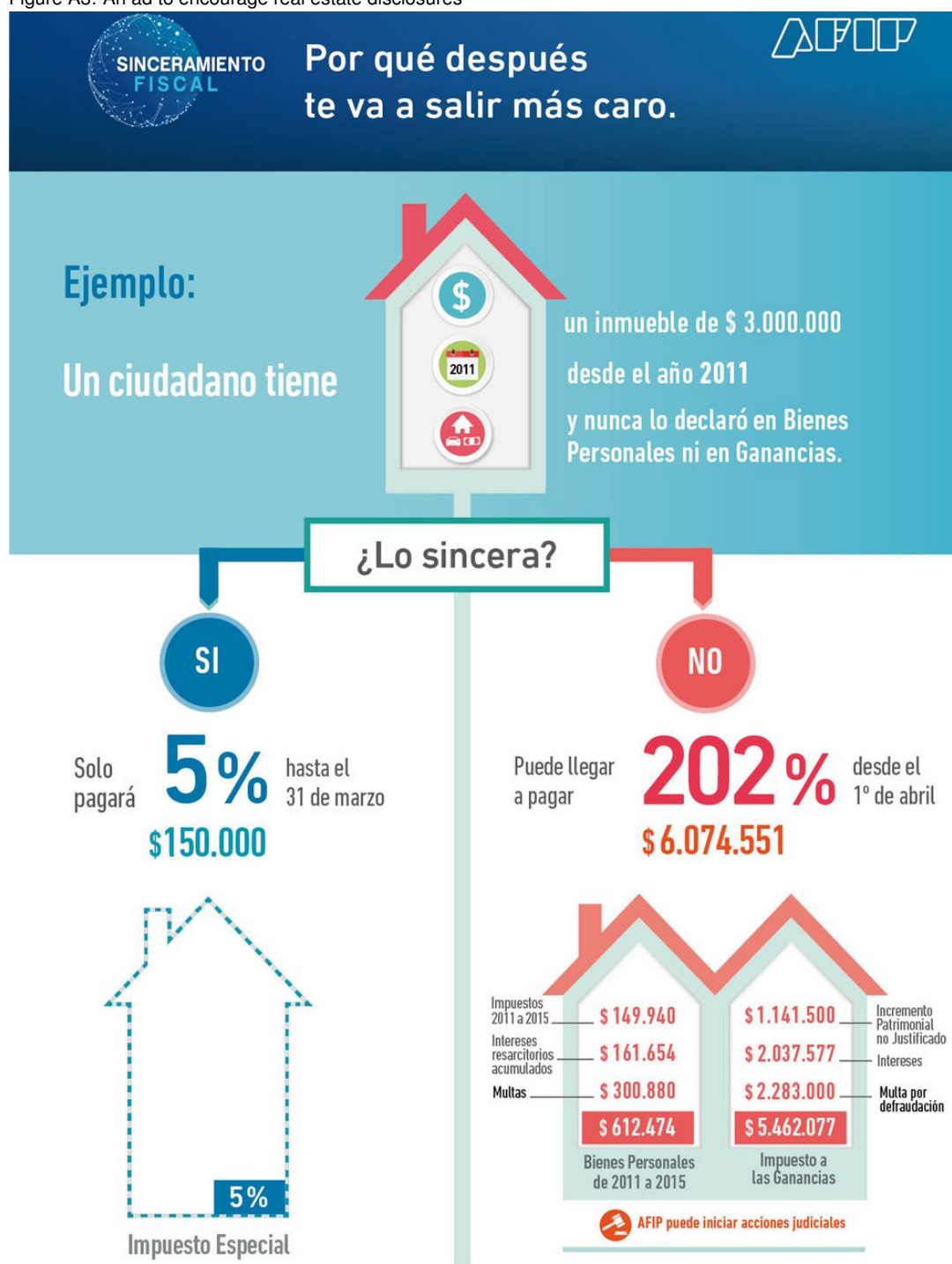
Figure A2: Wealth tax filers and wealth tax payers



Note: this figure plots the number of wealth tax filers and wealth taxpayers between 2002 and 2020 on the left axis, and the wealth tax exemption threshold (in 2015 pesos) on the right axis.

Source: authors' calculations using data from AFIP statistical yearbooks.

Figure A3: An ad to encourage real estate disclosures



Note: the banner presents the hypothetical case of a citizen with property worth Arg\$3 million that had never been declared in their income and wealth tax returns. The left blue panel shows a 5 per cent penalty (Arg\$150,000) if the person comes forward and discloses it before 31 March 2017. The right red panel shows that the penalty increases to 202 per cent (Arg\$6 million) starting 1 April 2017 if the person does not disclose it under the amnesty and is caught by AFIP.

Source: AFIP website.

Figure A4: Three banners at the entrance of AFIP's building in Buenos Aires



Note: the banners on the left, in the centre, and on the right say: 'Pay 10% until December 31st', 'Disclose your undeclared assets', and 'Pay 15% until March 31st', respectively.

Source: AFIP website.

Figure A5: An advert to encourage amnesty participation



Note: the advert translates to: 'Tax Amnesty. Declaration of assets. Report your assets, contribute to your country, we achieve better pensions. We all grow.'

Source: AFIP website.

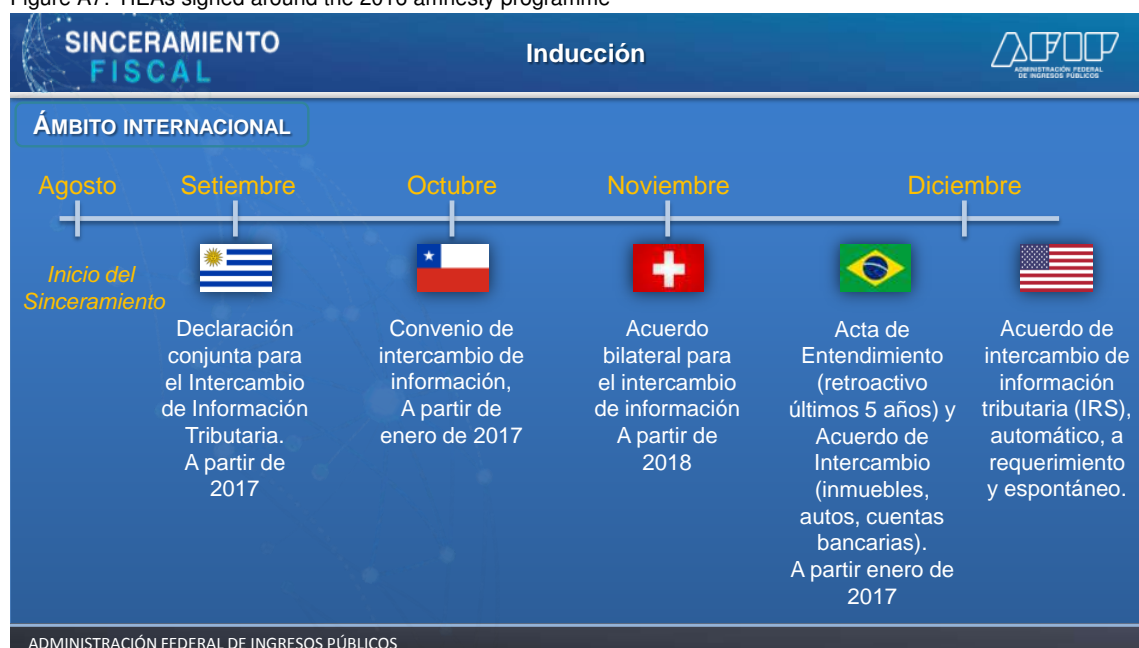
Figure A6: Screenshots of AFIP's website about the 2016 amnesty



Note: this figure reports screenshots of AFIP's website regarding the 2016 tax amnesty. The top left panel reads: *Tax Amnesty. How to disclose assets. Access this [video-tutorial](#) for a step-by-step guide to report your undeclared assets and enjoy the benefits.* The top right panel reads: *Law 27.260. Tax Amnesty. This is an opportunity to do your part, declare all your assets, regularize your debt and, if you complied, find out about the benefits.* The middle left panel reads: *Tax Amnesty. Do you have undeclared cash? You have until October 31st. Don't miss it out. You still have time!* The middle right panel reads: *Tax Amnesty. New App for smartphones. You can now download the tax amnesty's App.* Note also that the bottom of these four panels shows the countdown to the deadline of the amnesty programme. The bottom panel shows a calculator that was made available for people to simulate the tax penalty when disclosing their assets.

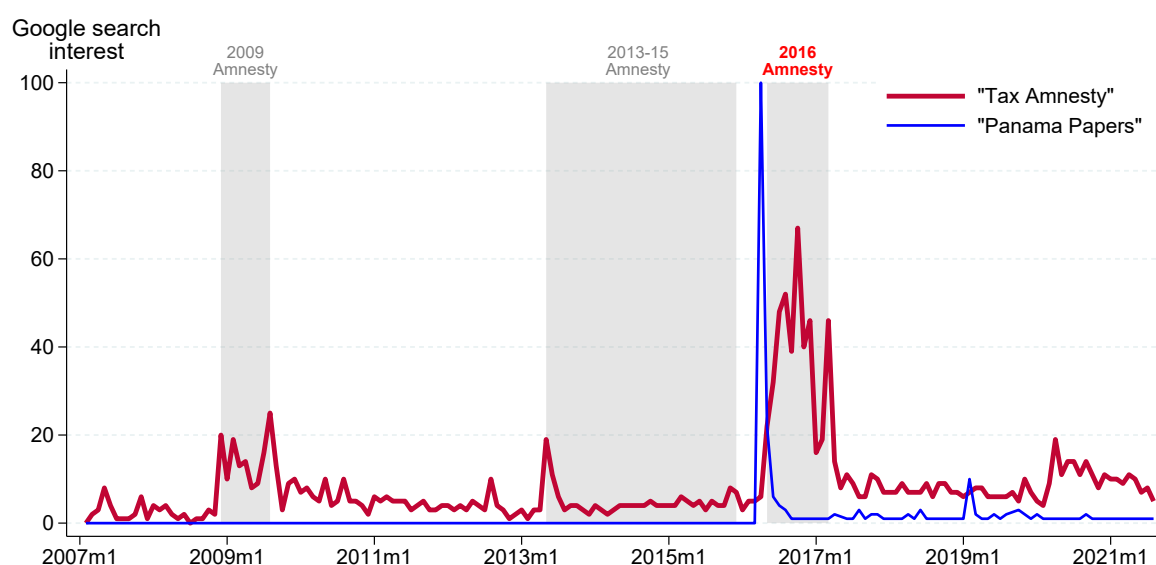
Source: AFIP website.

Figure A7: TIEAs signed around the 2016 amnesty programme



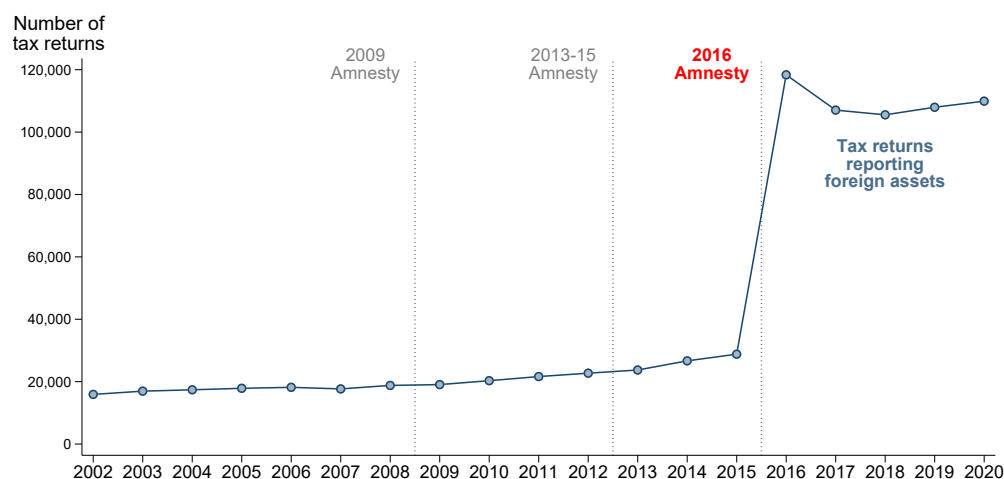
Note: this figure plots the timeline of TIEAs signed in 2016 between Argentina and Uruguay (September), Chile (October), Switzerland (November), Brazil (December), and the United States (December).
Source: AFIP communication campaign.

Figure A8: Google search interest



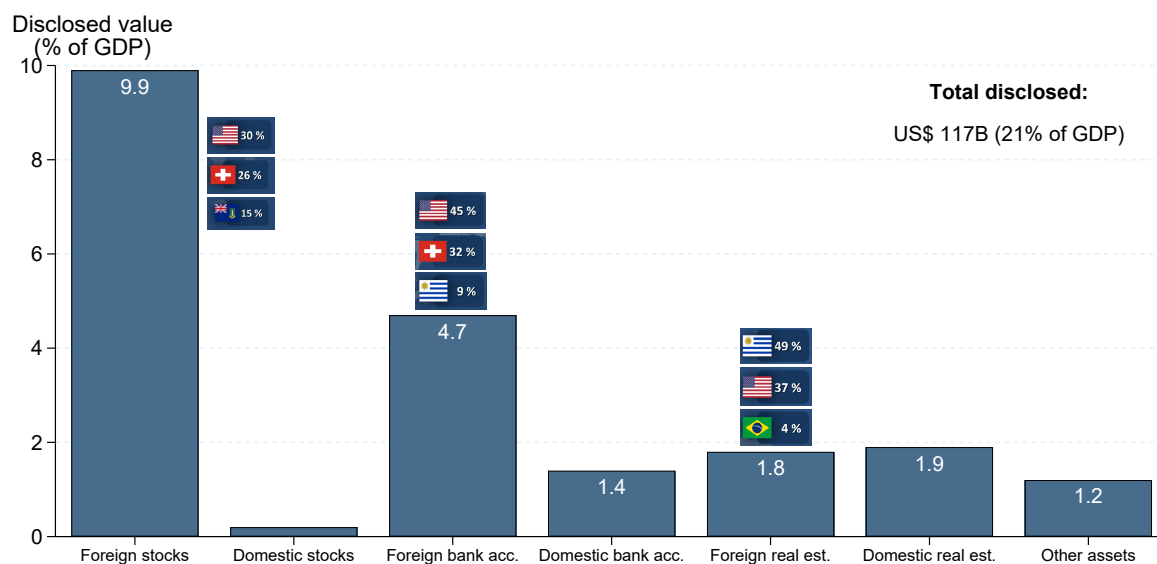
Source: authors' calculations using data from Google Trends.

Figure A9: Number of tax returns reporting foreign assets (levels)



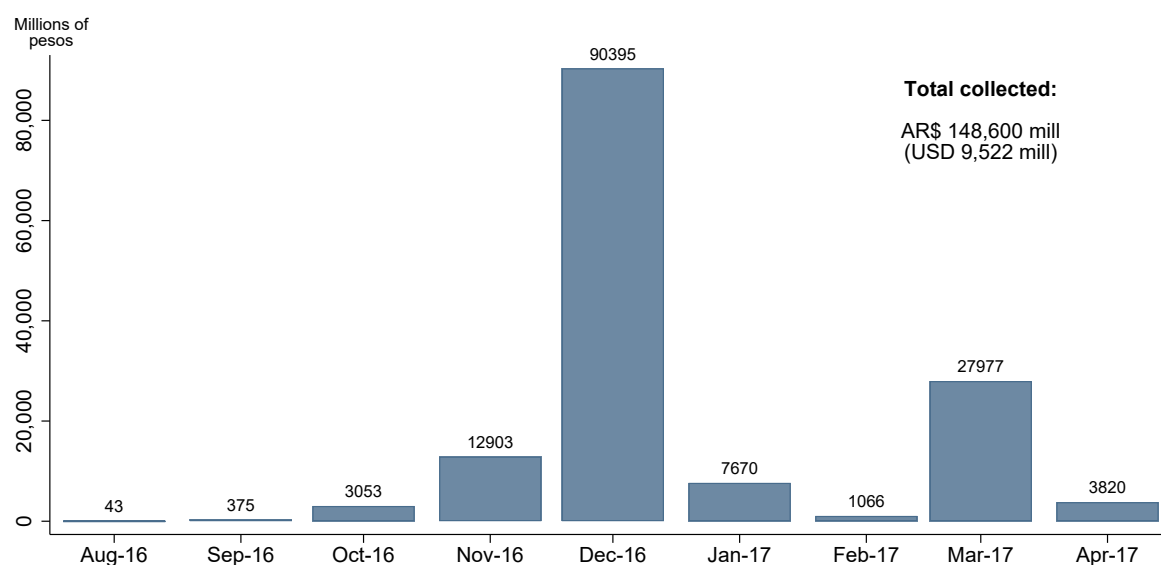
Note: this figure plots the number of taxpayers declaring foreign assets in wealth tax returns over time.
Source: authors' calculations using data from AFIP statistical yearbooks.

Figure A10: Where had the assets disclosed in 2016 been hidden?



Note: this figure plots the value of disclosed assets in the 2016 tax amnesty by type and location.
Source: authors' compilation based on official information from the national tax authority AFIP.

Figure A11: Revenue from the 2016 amnesty's special tax peaked in December 2016

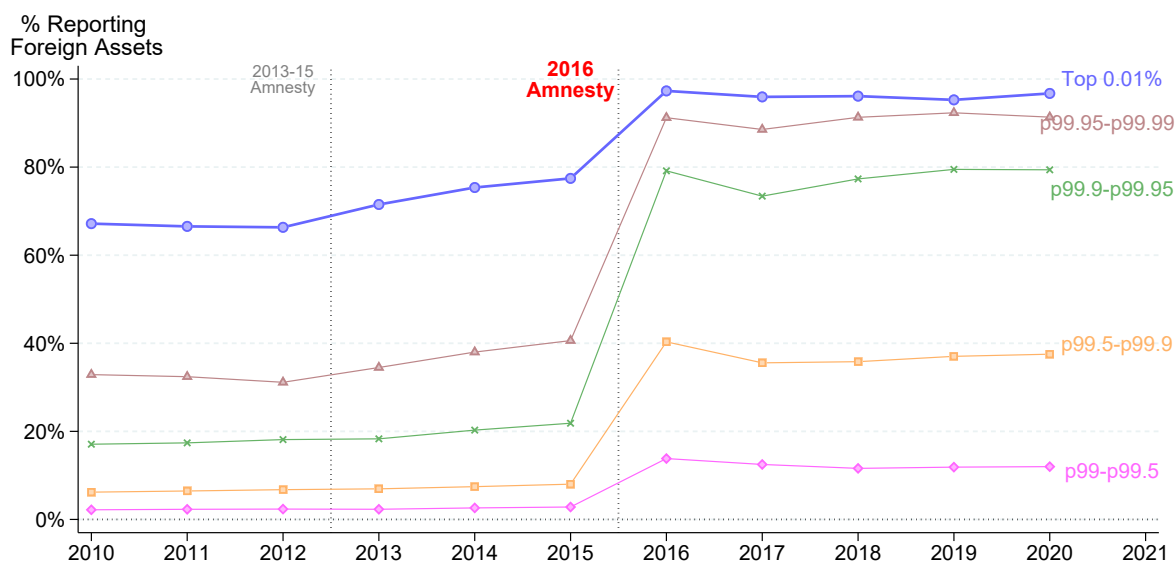


Note: the amnesty took place between August 2016 and March 2017 and raised US\$9.522 billion in revenue from penalties ('special tax'). As a benchmark, this was the third largest source of tax revenue in 2016, after VAT and income tax. Arg\$ 1,298 million were left unassigned to any month and April 2017 corresponds to late payments. Most disclosures of assets happened in December 2016, before the highest penalty fee increased from 10 per cent to 15 per cent, raising 61 per cent of the special tax revenue in only one month.

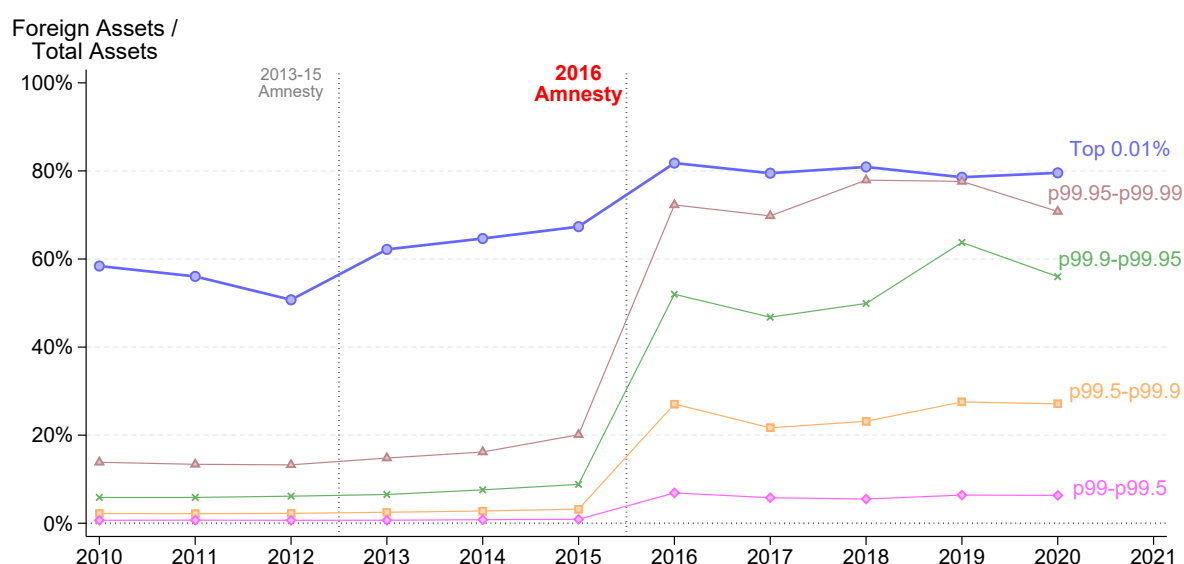
Source: authors' calculations using data from AFIP statistical yearbooks.

Figure A12: Foreign assets reported by top percentile groups

(a) Share of taxpayers reporting foreign assets

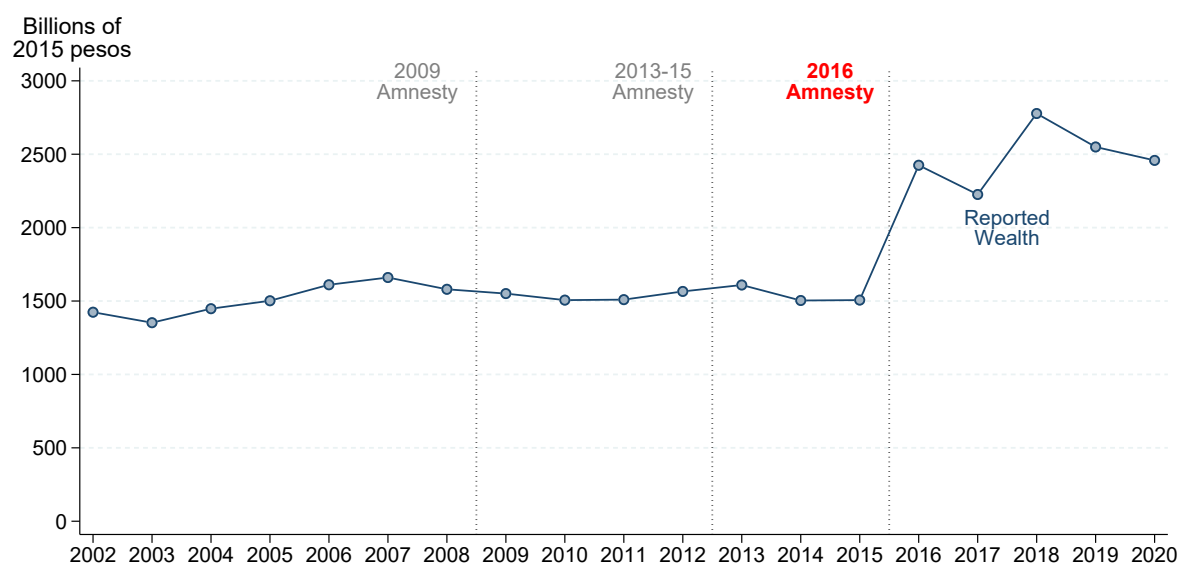


(b) Foreign assets as a share of total assets



Note: this figure plots foreign assets reported by the top 1 per cent separately by groups of increasing assets. Panel (a) plots the share of individuals reporting a foreign asset, while Panel (b) plots foreign assets as a share of total assets. Nearly 100 per cent of individuals in the wealthiest 0.01 per cent of the distribution report a foreign asset after the 2016 amnesty programme. Since other individuals in the top 0.1 per cent did not declare foreign assets before the amnesty, they experience a large increase after the amnesty both in terms of the share reporting a foreign asset and the value of reported foreign assets. Source: authors' calculations using data from AFIP statistical yearbooks.

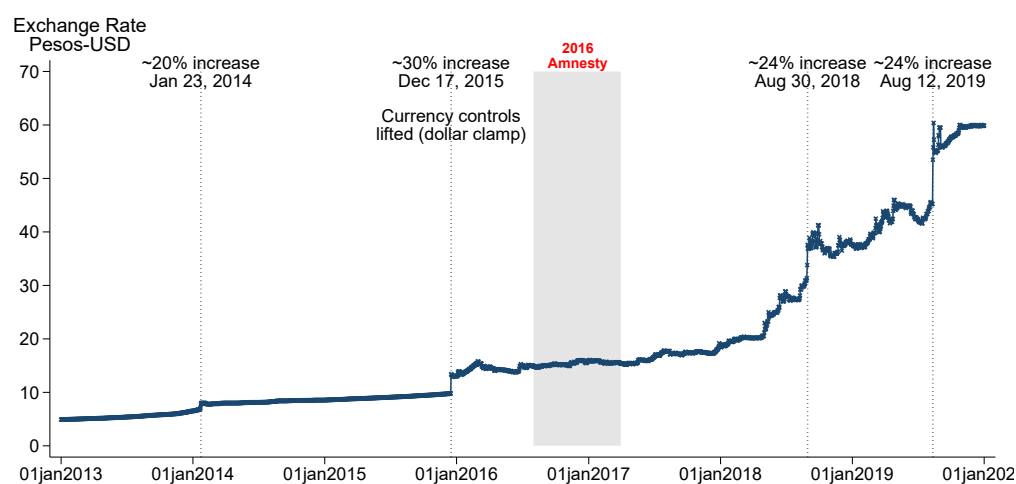
Figure A13: Reported wealth in levels



Note: this figure plots the total value of wealth reported by tax filers in constant 2015 pesos. The exchange rate was about Arg\$12.9 per US\$1 in December 2015.

Source: authors' calculations using data from AFIP statistical yearbooks.

Figure A14: Exchange rate: Argentine pesos per US dollar



Note: this figure plots the nominal exchange rate of Argentine pesos per US dollar between 2013 and 2020.

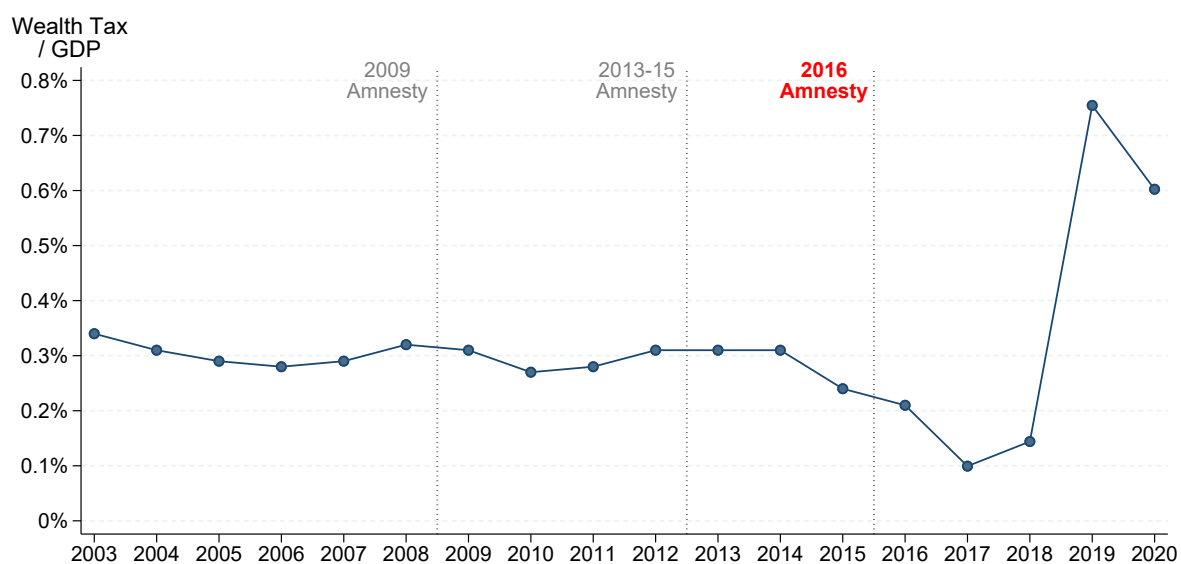
Source: authors' compilation based on data from the Central Bank of the Argentine Republic (BCRA).

Figure A15: Top statutory wealth tax rate and effective tax rate



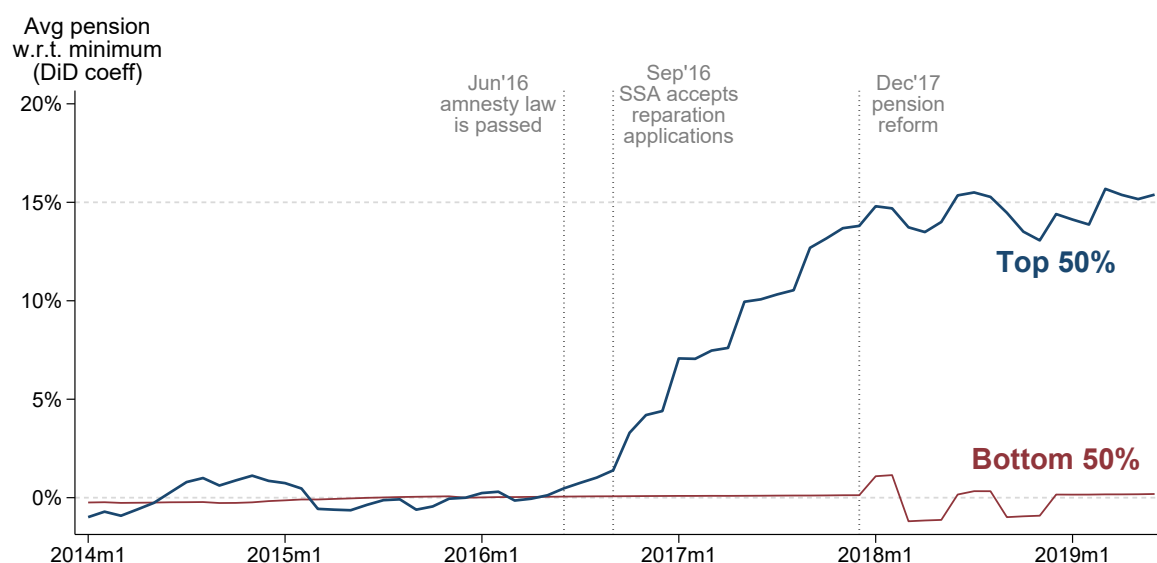
Note: this figure plots the top statutory wealth tax rate against the average effective wealth tax rate between 2002 and 2020. The average effective wealth tax rate is the wealth tax liability divided by total (taxable and non-taxable) assets. Source: authors' calculations using data from AFIP statistical yearbooks.

Figure A16: Wealth tax revenue to GDP ratio (%): 2003–20



Note: this figure plots the ratio of wealth tax revenue to GDP for the period 2003–20. Source: authors' calculations using data from AFIP statistical yearbooks.

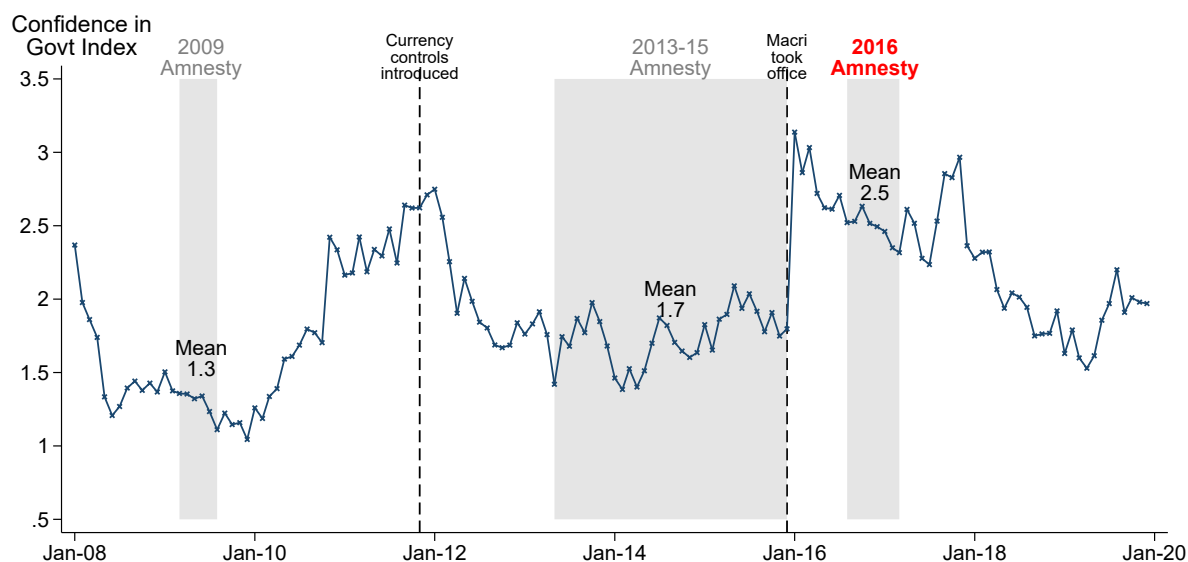
Figure A17: Difference between average and minimum pension for the bottom and the top 50 per cent of retirees



Note: this figure shows how pensions increased after the 2016 amnesty for the top 50 per cent of retirees earning above the minimum pension (blue line) but not for the bottom 50 per cent who receive the minimum pension and were unaffected by the reparation programme (red line). Each series plots the DD coefficient comparing the average pensions relative to the minimum pension in December 2015.

Source: authors' calculations using data from ANSES.

Figure A18: Confidence in government (UTDT index)



Note: the UTDT index measures the evolution of public opinion about the work carried out by the national government. The scale of this confidence index varies from 0 (low) to 5 (high).

Source: authors' calculations using data from *Indice de Confianza en el Gobierno*. Escuela de Gobierno. Universidad Torcuato Di Tella (<https://www.utdt.edu/icg>).

Table A1: Tax rates and wealth tax thresholds: 1991–2020

Fiscal Years	Exemption Threshold	Bracket 1	Bracket 2	Bracket 3	Bracket 4			
1991-1994	100k/102.3k	1%						
1995-1998	102.3k	0.5%						
1999-2006	102.3k	0.5%	200k	0.75%				
2007-2015 (notches)	305k	0.5%	750k	0.75%	2m	1%	5m	1.25%
2016	800k	0.75%						
2017	950k	0.50%						
2018	1.05m	0.25%						
2019-2020 domestic assets	2m	0.5%	3m	0.75%	6.5m	1%	18m	1.25%
2019-2020 foreign assets	2m	0.7%		1.20%		1.80%		2.25%

Note: taxable thresholds (in current pesos) are reported in blue. During the period 2007–15 the thresholds operated as notches. Besides the exemption threshold, the tax has a filing threshold for people with annual gross earnings above the following thresholds: 2007–14: \$96k; 2015: \$200k; 2016: \$500k; 2017: \$1m; 2018: \$1.5m; 2019: \$2m; 2020: \$2.5m.

Source: authors' compilation based on Ministerio de Economía (2022).

Table A2: The 2016 amnesty according to AFIP

Asset type	Value (in million US\$)	% of total	% of GDP
Investments—abroad	54,999	47	10
Investments—in Argentina	860	1	0
Cash deposits—abroad	25,925	22	5
Cash deposits—in Argentina	405	0	0
National/foreign currency—in Argentina	7,344	6	1
Real estate—abroad	10,124	9	2
Real estate—in Argentina	10,434	9	2
Rest of assets	6,685	6	1
Total	116,775	100	21

Note: this table breaks down the US\$116,755 disclosed in the 2016 amnesty programme by type of asset. The geographic distribution of assets located abroad is the following. Investments abroad: 30 per cent located in the United States, 26 per cent in Switzerland, and 15 per cent in the British Virgin Islands; cash deposits abroad: 45 per cent located in the United States, 32 per cent in Switzerland, and 9 per cent in Uruguay; real estate abroad: 49 per cent located in Uruguay, 37 per cent in the United States, and 4 per cent in Brazil. The 'rest of assets' category includes: vehicles, boats, aeroplanes, art, jewellery, and more. The value disclosed in real estate corresponds to 167,000 properties—110,000 located in Argentina and 57,000 located abroad.

Source: authors' compilation based on official information from the national tax authority AFIP.