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An Updated Action-based Dataset of Fiscal Consolidation

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An Updated Action-based Dataset of Fiscal Consolidation

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This paper presents a dataset of fiscal consolidation for 17 OECD economies during 1978-2020 and 14 economies in Latin America and the Caribbean during 1989-2020. We focus on discretionary changes in taxes and government spending primarily motivated by a desire to reduce the budget deficit and not by a response to prospective economic conditions. To identify the motivation and budgetary impact of the fiscal policy changes, we examine contemporaneous policy documents, including central bank reports, *Convergence Programmes* and *Stability Programmes* submitted by the authorities to the European Commission, and IMF and OECD reports. The resulting series can be used to estimate the macroeconomic effects of fiscal consolidation.

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* An earlier version of this database was used for analysis in IMF (2021) and IMF (2023).

WORKING PAPERS

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Contents

I. Introduction

This paper presents a dataset of fiscal consolidation for 17 Organization for Economic Co-operation and Development (OECD) economies during 1978-2020 and 14 economies in Latin America and the Caribbean during 1989-2020. In so doing, we build on earlier work by IMF staff (Devries and others 2011, and Carriere-Swallow and others 2021) as well as by Alesina and others (2018) who follow the same methodology.

These earlier studies address problems associated with the conventional approach to identifying fiscal policy consolidation based on statistical concepts such as the rise in the cyclically-adjusted primary budget balance (CAPB). Using the CAPB to estimate the macroeconomic effects of fiscal consolidation is problematic. First, cyclical adjustment methods suffer from measurement errors that are likely to be correlated with economic developments. In particular, cyclical adjustment typically fails to remove the impact of sharp swings in economic activity and asset prices from fiscal data, resulting in changes in the CAPB that are correlated with economic activity but are not necessarily linked to policy actions. Second, even if the change in the CAPB accurately reflects discretionary changes in fiscal policy, those can be motivated by a desire to respond to cyclical fluctuations, raising reverse causality concerns. These shortcomings complicate efforts to estimate the macroeconomic effects of fiscal consolidation and are likely to bias the analysis toward finding evidence of expansionary effects.

To avoid these problems associated with the conventional approach, the aforementioned studies on which we build identify fiscal consolidation actions using a historical approach similar to that of Ramey and Shapiro (1998), Ramey (2011), Romer and Romer (2010). In particular, we examine policymakers' intentions and actions as described in contemporaneous policy documents, and identify measures motivated primarily by deficit reduction. As Romer and Romer (2010) explain, such fiscal actions represent a response to past decisions and economic conditions rather than to prospective conditions. As a result, they are unlikely to be systematically correlated with other developments affecting output in the short term and are thus valid for estimating the macroeconomic effects of fiscal consolidation. The historical sources we examine include *Budget Reports*, central bank reports, *Convergence Programmes* and *Stability Programmes* submitted by the authorities to the European Commission, IMF reports, and OECD Economic Surveys. These documents provide evidence of policymakers' motivations at the time that decisions were taken, as well as the budgetary impact of the measures.

Based on this approach, our sample includes 242 cases of fiscal policy consolidation in 17 OECD economies during 1978 to 2020. The data are presented at an annual frequency. The 17 countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, Portugal, Spain, Sweden, the United Kingdom and the United States. Our sample for 14 economies in Latin America and the Caribbean includes 82 cases of fiscal policy consolidation during 1989 to 2020. The 14 economies are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, Guatemala, Jamaica, Mexico, Paraguay, Peru, and Uruguay.

Part II describes how we determine the motivation of fiscal actions and their budgetary effects from the historical record. Parts III and IV provide detailed citations for the cases of fiscal consolidation that we identify for the two groups of countries, respectively. Tables A1 and A2 in Annex I tabulate the full set of fiscal consolidation cases in the dataset and provide a breakdown into spending and tax measures.

II. Methodology

Motivation of Measures

A central step in the analysis is to examine policymakers' intentions to ensure that the tax and spending measures that we include in our database were motivated primarily by the desire to reduce the budget deficit and not by a response to prospective economic conditions. The documents for the countries in our sample indicate two principal motivations for discretionary fiscal contraction: a desire to reduce the budget deficit to shore up government financial sustainability; and a desire to restrain domestic demand for cyclical reasons. In

most cases, governments introduce fiscal consolidation measures based on a desire to reduce the budget deficit.[1]

For the purposes of our analysis, we only record fiscal actions primarily motivated by the desire to reduce the budget deficit in the dataset. If consolidation is motivated primarily by restraining domestic demand, we note its occurrence in the paper, but do not include it in our database. By the same token, we record fiscal consolidation in our database even if it is followed by an adverse shock and an offsetting countercyclical discretionary stimulus. For example, imagine that two countries adopt identical fiscal consolidation policies at the beginning of the year, but then one is hit by an adverse shock and so adopts discretionary stimulus that completely offsets the fiscal consolidation. Thus, there may be no overall deliberate policy tightening in the country hit by the adverse shock, despite the presence of the same consolidation measures as in the other country. In such cases, to avoid selection bias—omitting fiscal consolidations associated with unfavorable shocks—we include the associated fiscal consolidation measures in our database. The case of Japan in 2019 provides a real-world counterpart to this hypothetical example. As documented in what follows, the authorities implemented a consumption tax hike in October 2019 as part of a multi-year fiscal consolidation plan. However, the budgetary savings were partly offset by discretionary government support aimed at smoothing the anticipated impact of the tax hike on aggregate demand. As these offsetting measures were motivated by counter-cyclical considerations, we do not record them in the dataset and include only the budgetary impact of the consumption tax hike.

At the same time, if fiscal consolidation is offset by fiscal actions not primarily motivated by cyclical fluctuations, such as a tax cut motivated by long-run supply-side considerations, we compute the sum of the measures and conclude that consolidation occurred if the overall change in policy yields budgetary savings. For example, if spending cuts motivated by deficit reduction are fully offset by tax cuts associated with long-run supply-side considerations, we conclude that no fiscal consolidation occurred. France in 2018 provides a real-world counterpart to this hypothetical example. As documented in what follows, in 2018, the budgetary savings from spending cuts motivated by deficit reduction were partially offset by a tax cut motivated by providing long-run tax relief and enhancing business competitiveness. In this case, we report the budgetary savings of the spending cuts net of the tax cut.

Budgetary Effects

The historical sources and records described above provide the estimated budgetary impact of fiscal consolidation measures. Following Romer and Romer (2010), we use the contemporaneous estimates contained in these sources unless retrospective estimates are available, which is rarely the case. We record the budgetary effect of the fiscal consolidation measures in the year in which they come into effect. Unless otherwise stated, the concept of government corresponds to the general government. To facilitate empirical work using the series, we scale the budgetary impact of the measures in percent of GDP.

If measures were announced but the historical record suggests that they were not implemented, we do not include them in the database. To assess whether measures were implemented, we examine subsequent editions of the historical documents that report on recently implemented policy actions. The case of Spain during 2015-16 provides an example of fiscal consolidation that was initially envisaged but that, the historical record suggests, was not implemented.[2]

[1] Finland in the mid 1980s provides an example of fiscal consolidation motivated by a desire to restrain domestic demand for cyclical reasons, as the 1985 *IMF Recent Economic Developments* reports (pp. 24-25): “As the international recovery gathered strength during 1983, it was judged necessary to tighten fiscal policy so as to offset the strong stimulus likely to derive from the expected surge in the growth of external demand and to counter the mounting imbalances in the economy… The shift to a contractionary fiscal stance had the desired result, and the growth of domestic demand decelerated notably, just as the boom in exports was developing.”

[2] The 2014 *IMF Staff Report* notes (p. 25) that “The government’s strategy envisages reducing the deficit to below 3 percent of GDP by 2016, mainly by containing spending” but the 2015 *IMF Staff Report* reports that (p. 7) “The fiscal stance turned expansionary in 2015–16” with “reductions in personal and corporate income taxes that had larger-than-anticipated impacts and overrun of non-entitlement expenditures.”

We also distinguish between permanent and temporary measures. Temporary policy measures are recorded as having a positive budgetary impact (implying an increase in saving) when they come into effect and a negative impact when they expire. For example, we record a one-year increase in taxes of $1 billion in year *t* as having an impact of $1 billion in year *t* and of –$1 billion in year *t+1*. In contrast, a permanent measure is recorded as having a positive budgetary impact when it comes into effect and zero thereafter. For example, a permanent tax hike of $1 billion would be coded as $1 billion in year *t* and zero thereafter. Overall, therefore, the budgetary effects can be both negative and positive.

II. 17 OECD Economies

Our dataset for the 17 OECD economies consists of three parts.

First, for the years 1978-2009, we use the dataset of Devries and others (2011), which includes 173 cases of action-based fiscal consolidation motivated by deficit reduction.

Second, for the years 2010-14, we use as our main source the cases of fiscal consolidation identified and documented by Alesina and others (2018) who follow the Devries and others (2011) methodology and extend the dataset through to 2014 for 16 OECD economies (the original 17 except The Netherlands), as explained in the overview to their dataset: "For each country we go back to the original sources consulted by Devries et al. and follow the same methodology to extend the time span of the dataset to 2009-2014." Alesina and others (2018) also review the dataset of Devries and others for 1981-2009 and make minor adjustments explained in their dataset documentation.[3]

To confirm the consistency of the approach of Alesina and others (2018) with the original approach of Devries and others (2011) we estimate the following relation: $D = \alpha + \beta A + \varepsilon$ where D = fiscal consolidation series (in percent of GDP) constructed by Devries and others, and A = fiscal consolidation series (in percent of GDP) constructed by Alesina and others, for the 1981-2009 period during which the two datasets overlap. The relation has a tight fit, with an *R*-squared statistic of 96 percent. The slope coefficient (β) estimate is 1.0 (*t*-statistic = 112.6) and the intercept (α) estimate is near zero (–0.01; *t*-statistic = –1.39). This reassuring result confirms the consistency of the methodological approaches and that combining the datasets is appropriate.

The Netherlands is not included in the Alesina and others (2018) dataset covering 2010-14 and, after reviewing the historical record, we identify three cases of action-based fiscal consolidation motivated by deficit reduction during those years, as documented in what follows. In addition, for 2014, we add the case of fiscal consolidation in Japan based on a consumption tax hike that is not in the Alesina and others (2018) database.

Finally, to add further to these earlier studies, we review the historical record for the 17 OECD economies for 2015-2020 and identify 9 cases of action-based fiscal consolidation motivated by deficit-reduction. These cases pertain to Denmark, Finland, France, Japan, Spain, and the United Kingdom. In the remaining ten economies, after reviewing the historical record, we find little evidence of action-based fiscal consolidation motivated by deficit reduction during 2015-2020 in the main historical sources described above. Germany provides an example of a case where, for 2015-2020, there is little evidence of action-based fiscal consolidation motivated

[3] See notes by Alesina and others (2018) on their dataset here: https://igier.unibocconi.eu/research/datasets/fiscal-adjustment-plans/dataset. Given the close similarity of the results for 1981-2009 between the two datasets, we use the original Devries and others (2011) dataset for 1981-2009.

by deficit reduction.[4] Italy provides a further example.[5] Overall, our dataset for the 17 OECD economies contains 242 identified cases of fiscal consolidation during 1978-2020.

In what follows, for the new episodes of fiscal consolidation that we identify, we attempt to provide a sufficient number of quotations and citations from the historical record so that readers can see the evidence behind our conclusions regarding the motivation and budgetary impact of fiscal consolidation actions.

A. Finland[6]

Finland 2015

Fiscal consolidation amounted to 1.0 percent of GDP, with 0.35 percent of GDP from tax hikes and 0.65 percent of GDP from spending cuts. Fiscal consolidation was motivated by making progress toward aligning Finland's budget deficit with the medium-term objective (MTO) under the EU Stability and Growth Pact, as the *European Commission Assessment of the 2015 Stability Programme* for Finland explains (p. 3): "Finland is currently subject to the preventive arm of the Stability and Growth Pact and should ensure sufficient progress towards its MTO." In 2015, the main fiscal consolidation measures included 0.35 percent of GDP in net revenue measures (tax hikes net of tax cuts) and 0.65 percent of GDP in expenditure measures (*European Commission Assessment of the 2015 Stability Programme* for Finland, p. 8). Revenue measures included: Decreasing the effective income tax rate (0.05 percent of GDP); increasing taxes on capital income (0.05 percent of GDP); lowering other direct taxes (0.05 percent of GDP); increasing other indirect taxes (0.2 percent of GDP); and increasing social security contributions (0.2 percent of GDP). Spending measures included: reducing consumption expenditure (0.2 percent of GDP); lowering transfers to businesses and industry (0.05 percent of GDP); lowering transfers to households (0.2 percent of GDP); lowering other transfers (0.15 percent of GDP); and lowering real investment (0.05 percent of GDP). Total action-based fiscal consolidation in 2015 was thus 1.0 percent of GDP, with 0.35 percent of GDP from tax hikes and 0.65 percent of GDP from spending cuts.

Finland 2016

Fiscal consolidation amounted to 0.65 percent of GDP, with 0.4 percent of GDP from spending cuts and 0.25 percent of GDP from tax measures. Fiscal consolidation was again motivated by making progress toward aligning Finland's budget deficit with the medium-term objective (MTO) under the EU Stability and Growth Pact (see entry for 2015). As the 2017 *IMF Staff Report* notes (p. 1): "The authorities are implementing a multi-year consolidation plan to address long-term sustainability concerns." In terms of measures, the *European Commission Assessment of the 2016 Stability Programme* for Finland explains (p. 8): "Most important among the measures taken for 2016 are expenditure cuts which, based on the *Stability Programme*, amount to 0.4% of GDP. Measures increasing general government revenues include the increase in unemployment insurance contribution and increase of tobacco, waste and energy taxes." Total action-based fiscal consolidation in 2015 thus amounted to 0.65 percent of GDP, with 0.25 percent of GDP in tax hikes and 0.4 percent of GDP in spending cuts.

[4] For Germany, the 2015 *IMF Staff Report Press Release* (No.15/337) notes the country's "healthy fiscal position" (p. 1) and "neutral fiscal stance" and the 2016-19 *IMF Staff Reports* similarly provide little evidence of action-based fiscal consolidation motivated by deficit reduction.

[5] For Italy, the 2015 *IMF Staff Report* documents tax cuts financed in part by spending cuts: "The 2015 budget cut labor taxes by 0.7 percent of GDP" (p. 25) and "The 2015 budget contains 0.6 percent of GDP in expenditure cuts" (p. 50) indicating, on net, no action-based fiscal consolidation. In 2016, there were further tax cuts and the 2016 *IMF Staff Report* note (p. 29) that "To support the still weak economy, the authorities are notably easing fiscal policy this year and backloading adjustment… The authorities plan to continue lowering taxes, including on corporate income in 2017 and on personal income in 2018, and cancel planned hikes in VAT and excise rates … The latter are planned to be replaced in part by spending review measures." During 2018 and 2019, there is evidence of expansionary fiscal policy measures: the 2018 *IMF Staff Report* notes that "A new government took office with the goal of reigniting growth and supporting those left behind—through a large fiscal stimulus" and the 2019 *IMF Staff Report* notes (p. 6) that "The fiscal stance was slightly expansionary in 2019."

[6] The sources consulted for Finland are issues of the *European Commission Assessment of the Convergence Programme*, the *IMF Staff Report*, and *OECD Economic Surveys*.

B. France[7]

France 2015

Fiscal consolidation amounted to 1.0 percent of GDP based on spending cuts. Fiscal consolidation was motivated by addressing medium-term challenges, as explained in the 2015 *IMF Staff Report* (p. 9): "The 2015 *National Reform Programme and Stability Programme* set out a broad strategy to raise economic growth, reduce unemployment, and gradually consolidate the fiscal position via spending containment." As detailed in the 2014 *IMF Staff Report* (Box 1, p. 18) "The Spending Containment Package" included €50 billion of expenditure containment over 2015-17. It featured rationalization and extension of a wage freeze at the central government level, cuts to transfers to local governments, and savings in health and social protection spending. The multi-year spending-based consolidation was frontloaded, as the 2014 *IMF Staff Report* explains (p. 18): "The cuts are frontloaded: €21 billion in 2015, €16 billion in 2016, and €13 billion in 2017." For 2015, these cuts correspond to action-based fiscal consolidation of 1.0 percent of GDP based on spending measures.[8]

France 2018

Fiscal consolidation amounted to 0.4 percent of GDP, with spending cuts of 0.5 percent of GDP partially offset by 0.1 percent of GDP in tax cuts. The fiscal consolidation was motivated by promoting medium-term public financial health, as the 2017 *IMF Staff Report* explains (p. 6): "The government is pushing ahead with a broad and ambitious economic program aimed at making France's economy more dynamic and its public finances sustainable. The program calls for unprecedented efforts to reduce public spending, together with structural reforms to improve the functioning of the labor market, lower the tax burden, and boost competitiveness." The tax reform was motivated by providing long-run tax relief and enhancing business competitiveness and included—among other measures—a gradual reduction in the corporate tax rate (2018 *IMF Staff Report*, p. 5). Since the spending cuts motivated by deficit reduction were partly offset by tax cuts associated with long-run considerations, we follow the approach described in the introduction and compute the overall (net) budgetary impact. The 2018 *IMF Staff Report* estimates the budgetary impact of the policy measures in 2018 as follows ("Baseline Expenditure and Tax Measures," p. 15): 0.6 percent of GDP in spending cuts and 0.3 percent of GDP in tax cuts. At the same time, based on subsequent legislation and policy implementation, the 2019 *IMF Staff Report* provides updated estimates of the measures' budgetary impact in 2018 as follows ("Baseline Expenditure and Tax Measures," p. 9): 0.5 percent of GDP in spending cuts and 0.1 percent of GDP in tax cuts, implying (net) fiscal consolidation of 0.4 percent of GDP.

C. Japan[9]

Japan 2014

Fiscal consolidation totaled 1.125 percent of GDP based on tax hikes. Fiscal consolidation in 2014 and 2015 was part of a multi-year plan motivated by meeting deficit reduction objectives, as the 2013 *IMF Staff Report* (p. 46) notes: "In June 2013, the government reaffirmed its fiscal adjustment objectives of halving the primary deficits [as a percentage of GDP] by FY2015 [compared to the level in FY2010] and achieving a primary surplus by FY2020." Consumption tax hikes were a central part of the plan (p. 46): "The Diet passed legislation of a two-step increase of the consumption tax rate from 5 to 8 percent in April 2014 and to 10 percent in October 2015." The total budgetary impact of the prospective two-step consumption tax increase (from 5 percent to 10 percent) was estimated by the 2013 *IMF Staff Report* (p. 18) at 2.5 percent of GDP. The prospective budgetary impact of the October 2015 increase (from 8 percent to 10 percent) was estimated by the 2014 *IMF Staff Report* (p. 16) at 1.0 percent of GDP. (As discussed in what follows, the consumption tax increase planned for October 2015 was later postponed.) The full-year budgetary impact of the April 2014

[7] The sources consulted for France are issues of the *European Commission Stability Programme*, the *IMF Staff Report*, and *OECD Economic Surveys*.

[8] For 2016, the 2016 *IMF Staff Report* indicates that implementation of the spending cuts did not continue as planned in part reflecting (p. 6): "the recent decision to end the public sector wage-scale freeze, and new spending pressures such as increased security needs in the wake of recent terror attacks." Also, the 2017 *IMF Staff Report* notes (p. 13) that "Structural fiscal adjustment has stalled since 2015." Overall, as there is little evidence of additional fiscal consolidation measures in the 2016 and 2017 *IMF Staff Reports*, we do not record action-based fiscal consolidation for 2016 and 2017 in our database.

[9] The fiscal year is April-March. Therefore, a tax hike worth ¥1 billion in 2014/15 is allocated as follows: ¥ (3/4) billion in 2014 and ¥(1/4) billion in 2015. The sources consulted for Japan are issues of the *IMF Staff Report*.

consumption tax increase (from 5 percent to 8 percent) of 1.5 percent of GDP (2.5 – 1.0) is allocated as follows to calendar years: 1.125 percent of GDP in 2014 (= 1.5 percent of GDP × (3/4)) and 0.375 percent of GDP in 2015 (= 1.5 percent of GDP × (1/4)). We add the April 2014 consumption tax hike as a case of fiscal consolidation motivated by deficit reduction to our dataset.

Japan 2015

Fiscal consolidation totaled 0.375 percent of GDP based on tax hikes. The consumption tax increase in April 2014 had an estimated budgetary impact in calendar year 2015 of 0.375 percent of GDP (see entry for 2014). The additional consumption tax increase planned for October 2015 was postponed, initially to April 2017, as the 2015 *IMF Staff Report* notes (p. 51): "The government postponed the next consumption tax rate increase from 8 to 10 percent from October 2015 to April 2017." The October 2015 tax hike is a case of fiscal consolidation that was announced but not implemented and we therefore do not record it in our dataset for 2015.[10] It was later postponed again, as the 2016 *IMF Staff Report* notes (p. 57): "The government has postponed the April 2017 consumption tax hike to October 2019." However, the planned consumption tax hike remained a central part of the multi-year deficit reduction plan, as the 2016 *IMF Staff Report* explains (p. 17): "The delay of the consumption tax should have only a modest impact on the achievement of the fiscal consolidation target in FY2020 as its primary impact is to shift the revenue increases from FY2017 to FY2019."

Japan 2019

Fiscal consolidation amounted to 0.25 percent of GDP based on tax hikes. The consumption tax hike in October 2019 was part of a multi-year fiscal consolidation plan (see entry for 2015). At the same time, to smooth the tax hike's negative anticipated impact on aggregate demand, the authorities implemented temporary countercyclical fiscal support, as the 2019 *IMF Staff Report* explains (p. 5): "The consumption tax rate was increased by two percentage points as planned on October 1, together with measures to smooth demand volatility and mitigate the impact on the economy." Following our convention of recording fiscal actions primarily motivated by a desire to reduce the budget deficit in the dataset and of not recording countermeasures motivated by supporting demand (to avoid selection bias) we only record the budgetary impact of the consumption tax hike.[11] The full-year budgetary impact of the October 2019 consumption tax hike from 8 percent to 10 percent was estimated by the 2019 *IMF Staff Report* (p. 19) at 1.0 percent of GDP. The budgetary impact is allocated to calendar years as follows: 0.25 percent of GDP in 2019 (= 1.0 percent of GDP × (1/4)) and 0.75 percent of GDP in 2020 (= 1.0 percent of GDP × (3/4)).

Japan 2020

Fiscal consolidation amounted to 0.75 percent of GDP based on tax hikes. The consumption tax increase in October 2019 was motivated by deficit reduction and had an estimated budgetary impact on calendar year 2020 of 0.75 percent of GDP (see entry for 2019). In response to the COVID-19 pandemic, Japan implemented significant fiscal support measures in 2020 motivate by providing relief to households and firms (2022 *IMF Staff Report*, p. 5). However, following our convention of recording fiscal actions primarily motivated by the desire to reduce the budget deficit in the dataset (to avoid selection bias) we omit these fiscal support measures in response to the pandemic shock.

D. The Netherlands[12]

The Netherlands 2011

[10] The decision to postpone the tax hike reflected concerns regarding the weaker macroeconomic conditions, as the 2016 *IMF Staff Report Press Release* (No. 16/372) explains (p. 1): "The authorities responded to the weaker domestic and external economic environment through additional monetary and fiscal support, including the adoption of the negative interest rate policy, plans for additional fiscal stimulus, and the postponement of the scheduled 2017 consumption tax hike by two and a half years."

[11] The 2018 *IMF Staff Report* provides further details on the counter-cyclical motivation of the mitigation measures accompanying the consumption tax hike (p. 5): "At the Cabinet meeting on October 15 2018, PM Abe stated that the government will take all possible measures to mitigate the impact of the planned consumption tax increase. On top of already announced policy measures such as a reduced tax rate for food and non-alcoholic beverages, the government will formulate additional measures to address demand fluctuations."

[12] The sources consulted for The Netherlands are issues of the *European Commission Stability Programme*, and the *IMF Staff Report*.

Fiscal consolidation amounted to 0.3 percent of GDP, with 0.2 percent of GDP in spending cuts and 0.1 percent of GDP in tax increases. Fiscal consolidation in 2011 was part of a multi-year plan motivated by ensuring medium-term fiscal health, as the January 2010 *Stability Programme* of the Netherlands explains (p. 20): "Starting from 2011, the key priority is to ensure a return to sound public finances." Legislation to enforce the budgetary adjustment included the 2011 Deficit Reduction Act (January 2010 *Stability Programme* of the Netherlands, p. 10). The 2011 *IMF Staff Report* (p. 22) summarizes the estimated budgetary yield of the policy measures in the government's multi-year fiscal consolidation program, with spending cuts (reductions net of increases) estimated to yield 0.2 percent of GDP in savings and tax measures estimated to yield 0.1 percent of GDP in 2011. For 2012, the estimated budgetary impact of the measures is 0.5 percent of GDP, with spending cuts of 0.4 percent of GDP and tax increases of 0.1 percent of GDP. For 2013, the estimated budgetary impact of the measures is 0.6 percent of GDP, with spending cuts of 0.5 percent of GDP and tax increases of 0.1 percent of GDP. During 2011–2013, the measures included public sector wage moderation and across-the-board spending cuts, as well as higher tax and social insurance contributions. Subsequent reports confirm that the budgetary adjustment during 2011-13 was implemented, followed by a shift to a broadly neutral fiscal stance. The 2014 *IMF Staff Report* notes (p. 24): "After several years of consolidation, the fiscal stance is set to return to neutral… Authorities agreed on a neutral fiscal stance as the appropriate medium-term target to anchor fiscal sustainability." Total action-based fiscal consolidation in 2011 was thus 0.3 percent of GDP (0.2+0.1).

The Netherlands 2012

Fiscal consolidation amounted to 0.5 percent of GDP, with 0.4 percent of GDP in spending cuts and 0.1 percent of GDP in tax hikes. Fiscal consolidation was part of a multi-year program motivated by improving medium-term fiscal health (see entry for 2011).

The Netherlands 2013

Fiscal consolidation amounted to 0.6 percent of GDP, with 0.5 percent of GDP in spending cuts and 0.1 percent of GDP in tax hikes. Fiscal consolidation was part of a multi-year program motivated by improving medium-term fiscal health (see entry for 2011).

E. Spain[13]

Spain 2017[14]

Fiscal consolidation amounted to 0.5 percent of GDP based on tax measures. The 2017 *IMF Staff Report* explains that (p. 9) "The 2017 budget, adopted in June, aims to reduce the deficit … through revenue measures of about ½ percent of GDP." It reports that "Corporate tax measures are projected to yield about 0.4 percent of GDP in additional revenue in 2017" and that, in addition, "measures to improve VAT administration and compliance have yielded around €600 million more in value added taxes in the first five months of 2017 compared to 2016" (about 0.1 percent of GDP at an annualized rate). For action-based fiscal consolidation in 2017, we thus record 0.5 percent of GDP (0.4+0.1) in our dataset.[15]

[13] The sources consulted for Spain are issues of the *European Commission Stability Programme*, and the *IMF Staff Report*.

[14] For Spain during 2015-16, there is little evidence of action-based fiscal consolidation motivated by deficit reduction. Measures to contain spending were initially envisaged but the historical record suggests that they were not implemented, and so we do not include them in the database. The 2014 *IMF Staff Report* notes (p. 25) that "The government's strategy envisages reducing the deficit to below 3 percent of GDP by 2016, mainly by containing spending." However, the 2015 *IMF Staff Report* reports that (p. 7) "The fiscal stance turned expansionary in 2015–16" with "reductions in personal and corporate income taxes that had larger-than-anticipated impacts and overrun of non-entitlement expenditures." Based on our convention for recording the implementation of fiscal consolidation, we therefore enter zero action-based consolidation for 2015-16 in our dataset.

[15] For Spain during 2018-19, there is little evidence of action-based fiscal consolidation motivated by deficit reduction. The 2018 *IMF Staff Report* notes (p. 10) that "The fiscal stance is easing in 2018, amid rising social and political demands. Several measures were adopted to support pensioners and low-income households, including broad increases in pension benefits in 2018–19."

F. United Kingdom[16]

United Kingdom 2015

Fiscal consolidation amounted to 0.25 percent of GDP based on spending cuts. Fiscal consolidation in 2015 was part of a multi-year effort that started after the global financial crisis and was motivated by ensuring medium-term fiscal health. Compared to earlier years, the pace of adjustment was more moderate, as the 2014 *IMF Staff Report* explains (p. 14): "The UK has been undertaking an ambitious fiscal consolidation program … The government remains fully committed to fiscal consolidation... After rapid tightening at the outset, the pace of discretionary tightening has moderated, relative to that in FY2011/12–FY2012/13." Fiscal consolidation in 2015 relied on spending restraint, as the 2014 *IMF Staff Report* indicates (p. 14): "Total expenditure is projected to fall by 1 percentage point to 42½ percent of GDP in FY2014/15, reflecting a cut in current spending and a small increase in investment." The budgetary impact of these spending cuts in calendar-year 2015 was 0.25 percent of GDP (¼ × 1 percent of GDP).

III. 14 Economies in Latin America and the Caribbean

For the 14 economies in Latin America and the Caribbean, our starting point is the dataset of Carriere-Swallow, David, and Leigh (2021), which includes 14 countries during 1989–2016. We here extend the sample for these economies through to 2020. We find evidence of 6 cases of action-based fiscal consolidation motivated by deficit reduction during 2017-2020 pertaining to Argentina, Brazil, Colombia, and Ecuador.

In what follows, for the new cases of fiscal consolidation that we identify, we provide quotations and citations from the historical record so that readers can see the evidence behind our conclusions regarding the motivation and budgetary impact of fiscal consolidation policies.

A. Argentina[17]

Argentina 2018

Fiscal consolidation amounted to 1.5 percent of GDP based on spending cuts. Fiscal consolidation was part of a multi-year plan motivated by reducing the budget deficit and restoring fiscal health, as the July 2018 *IMF Staff Report* explains (p. 10): "The authorities' adjustment program is anchored on the goal of achieving federal government primary balance by 2020. The fiscal effort will be front-loaded with a targeted primary deficit of 2.7 percent of GDP in 2018 and 1.3 percent of GDP in 2019." The authorities' fiscal consolidation plan was supported by a three-year Stand-By Arrangement (SBA) approved by the Executive Board of the IMF on June 20. The July 2018 *IMF Staff Report* estimated the budgetary impact of fiscal consolidation measures underway (p. 12) at 1.5 percent of GDP (not including 0.2 percent of GDP in asset sales).[18] The fiscal consolidation was based on reductions in both capital and current government spending. The December 2018 *IMF Staff Report* assessed the size of the fiscal consolidation implemented to be consistent with the plan (p. 9): "the primary federal deficit is likely to close 2018 at (or slightly below) the authorities' 2.7 percent of GDP target." Overall, action-based fiscal consolidation in 2018 is recorded in our database as totaling 1.5 percent of GDP based on spending cuts.

Argentina 2019

Fiscal consolidation amounted to 2.4 percent of GDP based on spending cuts. Fiscal consolidation was part of a multi-year plan motivated by reducing the budget deficit and putting government debt on a downward trajectory (see entry for 2018). The December 2018 *IMF Staff Report* envisaged a budgetary impact of fiscal

[16] Since the fiscal year (FY) runs April 1-March 31, measures in "FY t/t+1" are split across the two years as follows: ¾ to year t and ¼ to year t+1. For example, a tax hike worth £1 billion in 1994/95 is allocated as follows: £¾ billion to 1994 and £¼ billion to 1995. The sources consulted for the United Kingdom are various issues of the *Budget*, the *IMF Staff Report*, and *OECD Economic Surveys*.

[17] The sources consulted for Argentina are issues of the *IMF Staff Report* and the *IMF Ex-Post Evaluation of Argentina's Exceptional Access Under the 2018 Stand-By Arrangement*.

[18] Since the analysis focuses on tax and spending measures, we do not record asset sales as fiscal consolidation.

consolidation measures in 2019 (p. 9) of 2.4 percent of GDP (not including 0.4 percent of GDP in asset sales) based on both revenue and spending measures. The overall size of fiscal consolidation implemented in 2019 was consistent with the plan but relied to a greater extent on spending cuts, as explained in the 2021 *IMF Ex-Post Evaluation of Argentina's Exceptional Access Under the 2018 Stand-By Arrangement* (p. 29): "The primary balance targets were met, mainly by lowering expenditures, although the measures were generally of low—and decreasing—quality throughout the program." Overall, action-based fiscal consolidation in 2019 is recorded in our database as totaling 2.4 percent of GDP based on spending cuts.

B. Brazil[19]

Brazil 2017

Fiscal consolidation amounted to 0.9 percent of GDP with 0.66 percent of GDP in spending cuts and 0.24 percent of GDP in tax measures. Fiscal consolidation was motivated by restoring fiscal health, as the 2017 *IMF Staff Report* explains (p. 11): "The government aims to restore fiscal sustainability by gradually bringing primary balances toward surplus territory, with the support of the constitutional expenditure ceiling and social security reform." In terms of fiscal targets and measures, the 2017 *IMF Staff Report* notes (p. 11): "For 2017, the authorities aim to bring the primary deficit to –2.1 percent of GDP. They have introduced adjustment measures of 0.9 percent of GDP, including cuts in discretionary spending of 2/3 percent of GDP and a partial roll-back of payroll tax exemptions." The 2018 *IMF Staff Report* confirms that the fiscal adjustment took place in 2017 (p. 4): "The primary fiscal deficit declined to 1.7 percent of GDP in 2017, below the authorities' target, reflecting under-execution of discretionary expenditures." Overall, action-based fiscal consolidation in 2017 is recorded in our database as totaling 0.9 percent of GDP, with 0.66 percent of GDP from spending measures, and 0.24 percent of GDP from tax measures.

C. Colombia[20]

Colombia 2017

Fiscal consolidation in 2017 amounted to 0.7 percent of GDP based on tax increases. Fiscal consolidation was motivated by complying with Colombia's medium-term fiscal rule and placing government debt on a downward path. A Statement by the IMF Executive Director for Colombia published in May 2017 notes (p. 3) that "On the fiscal front, efforts have focused on consolidation in line with the medium-term fiscal rule" and the 2017 *IMF Staff Report* notes (p. 9) that "Staff and the government shared the priority to place public debt on a downward path starting this year." The 2017 *IMF Staff Report* explains how fiscal consolidation came from a revenue-augmenting tax reform with an estimated budgetary impact of 0.7 percent of GDP (p. 11): "The structural tax reform will help achieve a more balanced fiscal consolidation in 2017. In line with the fiscal rule, the central government deficit will narrow to 3.6 percent of GDP with the tax reform proceeds (0.7 percent of GDP) protecting social expenditure programs." Overall, action-based fiscal consolidation in 2017 is recorded in our database as totaling 0.7 percent of GDP based on tax increases.

D. Ecuador[21]

Ecuador 2018

Fiscal consolidation amounted to 3.3 percent of GDP with 2.3 percent of GDP in spending cuts and 1.0 percent of GDP in tax measures. Fiscal consolidation was motivated by the goal of improving fiscal health and was accompanied by fiscal institutional reforms, as the 2019 *IMF Staff Report* explains (pp. 5-6): "The current administration took office in May 2017 … Over the past year, the government has made progress in implementing reforms in a range of areas including: … A new fiscal framework that combines a formal debt anchor with a rule capping the growth of public spending (at Ecuador's long-term growth rate), supported by escape clauses and automatic correction mechanisms. … Lowering the non-oil primary deficit (including fuel subsidies) from 7.6 percent of GDP in 2016 to 5.3 percent of GDP deficit in 2018. The deficit reduction that took place in 2018 was largely a product of a reduction in capital spending (of 2.3 percent of GDP). The fiscal

[19] The sources consulted for Brazil are issues of the *IMF Staff Report*.

[20] The sources consulted for Colombia are issues of the *IMF Country Report* for Colombia.

[21] The sources consulted for Ecuador are issues of the *IMF Staff Report*.

position also benefited from the temporary effects of a tax amnesty during the course of the year (adding 1 percent of GDP to nonoil revenues)." Overall, action-based fiscal consolidation in 2019 is recorded in our database as totaling 3.3 percent of GDP, with 2.3 percent of GDP from spending cuts, and 1.0 percent from tax measures. As the 2018 tax amnesty was temporary, its budgetary impact in 2019 is recorded as –1.0 percent of GDP.

Ecuador 2019

Fiscal consolidation amounted to 1.0 percent of GDP with 2.0 percent of GDP in spending cuts and a 1.0 percent of GDP tax reduction. Fiscal consolidation was motivated by restoring fiscal health over the medium term, as the 2019 *IMF Staff Report* explains (p. 11): "The authorities have adopted a credible and ambitious medium-term fiscal plan that will put the debt-to-GDP ratio on a firmly downward path." Regarding the size of the fiscal consolidation, the 2019 *IMF Staff Report* notes (p. 14): "The authorities are planning to lower the non-oil primary deficit, including fuel subsidies, from 5.3 percent of GDP in 2018 to 0.3 percent of GDP by 2021. Around 2 percent of GDP of that effort would be accomplished in 2019." The report (p. 16) quantifies the budgetary impact of spending cuts in 2019 at 2.3 percent of GDP. The report also confirms that the temporary tax increase in 2018 (amnesty collection) had a budgetary impact in 2019 of –1.0 percent of GDP.[22] The 2021 *IMF Staff Report* confirms that the fiscal adjustment took place in 2019 (p. 14) although with spending cuts quantified at 2.0 percent of GDP rather than 2.3 percent of GDP as in the 2019 *IMF Staff Report*. Therefore, action-based fiscal consolidation in 2019 is recorded in our database as totaling 1.0 percent of GDP, with 2.0 percent of GDP from spending cuts, and –1.0 percent of GDP from tax measures.

[22] The 2019 *IMF Staff Report* also indicates (p. 16) asset monetization proceeds in 2019 of 0.8 percent of GDP, including from the concession of a hydroelectric plant. However, for the purposes of our analysis, such operations do not represent tax hikes or spending cuts and they are not recorded in our dataset.

Annex I.

Table A1. Deficit-driven Fiscal Consolidation in 17 OECD Countries
(Percent of GDP)

Country	Year	Total	Tax	Spend	Country	Year	Total	Tax	Spend
AUS	1985	0.45	0.00	0.45	CAN	1989	0.31	0.24	0.08
AUS	1986	1.02	0.17	0.85	CAN	1990	0.86	0.57	0.29
AUS	1987	0.90	0.19	0.71	CAN	1991	0.40	0.13	0.27
AUS	1988	0.10	-0.27	0.37	CAN	1992	0.21	-0.01	0.22
AUS	1994	0.25	0.25	0.00	CAN	1993	0.35	-0.01	0.36
AUS	1995	0.50	0.50	0.00	CAN	1994	0.49	0.04	0.45
AUS	1996	0.62	0.34	0.28	CAN	1995	0.99	0.18	0.81
AUS	1997	0.70	0.18	0.53	CAN	1996	0.97	0.09	0.88
AUS	1998	0.37	0.05	0.32	CAN	1997	0.47	0.01	0.47
AUS	1999	0.04	-0.04	0.07	CAN	2010	0.04	0.02	0.02
AUT	1980	0.80	0.11	0.69	CAN	2011	0.09	0.02	0.07
AUT	1981	1.56	0.50	1.06	CAN	2012	0.25	0.03	0.22
AUT	1984	2.04	1.30	0.74	CAN	2013	0.29	0.04	0.25
AUT	1996	2.41	0.88	1.53	CAN	2014	0.45	0.04	0.42
AUT	1997	1.56	0.44	1.12	DEU	1982	1.18	0.56	0.62
AUT	2001	1.02	0.90	0.12	DEU	1983	0.87	0.30	0.57
AUT	2002	0.55	0.00	0.55	DEU	1984	0.18	-0.41	0.59
AUT	2011	0.71	0.40	0.30	DEU	1991	1.11	1.08	0.03
AUT	2012	0.89	0.56	0.34	DEU	1992	0.46	0.27	0.19
AUT	2013	0.68	0.34	0.33	DEU	1993	0.11	-0.07	0.18
AUT	2014	0.72	0.08	0.64	DEU	1994	0.91	0.08	0.83
BEL	1982	1.66	0.00	1.66	DEU	1995	1.08	0.84	0.24
BEL	1983	1.79	0.69	1.10	DEU	1997	1.60	0.50	1.10
BEL	1984	0.69	0.28	0.41	DEU	1998	-0.10	0.00	-0.10
BEL	1985	1.61	0.73	0.88	DEU	1999	0.30	0.30	0.00
BEL	1987	2.80	0.00	2.80	DEU	2000	0.70	-0.05	0.75
BEL	1990	0.60	0.40	0.20	DEU	2003	0.74	0.74	0.00
BEL	1992	1.79	0.99	0.80	DEU	2004	0.40	-0.70	1.10
BEL	1993	0.92	0.43	0.49	DEU	2006	0.50	0.00	0.50
BEL	1994	1.15	0.55	0.60	DEU	2007	0.90	0.50	0.40
BEL	1996	1.00	0.50	0.50	DEU	2011	0.44	0.33	0.11
BEL	1997	0.91	0.41	0.50	DEU	2012	0.60	-0.09	0.69
BEL	2010	1.04	0.21	0.83	DEU	2013	-0.23	-0.19	-0.03
BEL	2011	0.84	0.50	0.34	DNK	1983	2.77	0.92	1.85
BEL	2012	2.43	0.85	1.58	DNK	1984	2.38	0.67	1.71
BEL	2013	1.71	0.64	1.08	DNK	1985	1.54	0.77	0.77
BEL	2014	0.77	0.16	0.61	DNK	1986	-0.72	-0.72	0.00
CAN	1984	0.27	0.27	0.00	DNK	1995	0.30	0.30	0.00
CAN	1985	1.03	0.53	0.50	DNK	2011	0.97	0.39	0.58
CAN	1986	0.99	0.84	0.15	DNK	2012	0.88	0.29	0.58
CAN	1987	0.28	0.14	0.14	DNK	2013	1.17	0.58	0.58
CAN	1988	0.30	0.33	-0.03	ESP	1983	1.90	1.90	0.00

Note: Table records budgetary impact of deficit-driven fiscal consolidation. AUS=Australia, AUT=Austria, BEL=Belgium, CAN=Canada, DEU=Germany, DNK=Denmark, ESP=Spain.

Table A1 (continued). Deficit-driven Fiscal Consolidation in 17 OECD Countries
(Percent of GDP)

Country	Year	Total	Tax	Spend	Country	Year	Total	Tax	Spend
ESP	1984	1.12	0.37	0.75	FRA	2018	0.40	-0.10	0.50
ESP	1989	1.22	0.98	0.24	GBR	1979	0.27	-0.45	0.72
ESP	1990	-0.40	-0.25	-0.15	GBR	1980	0.08	-0.13	0.21
ESP	1992	0.70	0.30	0.40	GBR	1981	1.58	1.43	0.16
ESP	1993	1.10	0.80	0.30	GBR	1982	0.53	0.48	0.05
ESP	1994	1.60	0.00	1.60	GBR	1994	0.83	0.68	0.15
ESP	1995	0.74	0.00	0.74	GBR	1995	0.28	0.23	0.05
ESP	1996	1.30	0.20	1.10	GBR	1996	0.30	0.00	0.30
ESP	1997	1.20	0.10	1.10	GBR	1997	0.69	0.53	0.16
ESP	2010	1.65	0.49	1.17	GBR	1998	0.31	0.30	0.01
ESP	2011	1.54	0.00	1.54	GBR	1999	0.21	0.21	0.01
ESP	2012	3.17	1.67	1.50	GBR	2010	0.41	0.15	0.26
ESP	2013	3.00	2.89	0.12	GBR	2011	1.04	0.75	0.29
ESP	2014	1.67	1.49	0.17	GBR	2012	0.82	0.31	0.51
ESP	2017	0.10	0.10	0.00	GBR	2013	1.06	0.26	0.79
FIN	1992	0.91	0.00	0.91	GBR	2014	0.94	0.28	0.66
FIN	1993	3.71	0.00	3.71	GBR	2015	0.25	0.00	0.25
FIN	1994	3.46	0.69	2.77	IRL	1982	2.80	2.54	0.26
FIN	1995	1.65	-0.63	2.28	IRL	1983	2.50	2.44	0.06
FIN	1996	1.47	0.00	1.47	IRL	1984	0.29	0.29	0.00
FIN	1997	0.23	-0.70	0.93	IRL	1985	0.12	0.12	0.00
FIN	2011	0.65	0.65	0.00	IRL	1986	0.74	0.74	0.00
FIN	2012	0.30	0.07	0.23	IRL	1987	1.65	0.53	1.12
FIN	2013	1.23	1.03	0.19	IRL	1988	1.95	0.00	1.95
FIN	2014	0.32	0.08	0.24	IRL	2009	4.74	2.35	2.39
FIN	2015	1.00	0.35	0.65	IRL	2010	4.12	0.90	3.21
FIN	2016	0.65	0.25	0.40	IRL	2011	3.49	0.82	2.67
FRA	1979	0.85	0.85	0.00	IRL	2012	3.15	1.25	1.90
FRA	1987	0.26	-0.50	0.76	IRL	2013	2.03	0.78	1.25
FRA	1989	-0.20	-0.20	0.00	IRL	2014	1.52	0.55	0.97
FRA	1991	0.25	0.00	0.25	ITA	1991	2.77	1.69	1.08
FRA	1992	-0.10	0.00	-0.10	ITA	1992	3.50	1.60	1.90
FRA	1995	0.28	0.43	-0.15	ITA	1993	4.49	2.00	2.49
FRA	1996	1.33	0.86	0.47	ITA	1994	1.43	-0.27	1.70
FRA	1997	0.50	0.41	0.09	ITA	1995	4.20	2.41	1.79
FRA	1999	-0.10	-0.10	0.00	ITA	1996	0.34	-0.74	1.08
FRA	2000	-0.20	-0.20	0.00	ITA	1997	1.82	0.89	0.93
FRA	2011	1.55	0.66	0.89	ITA	1998	0.68	0.01	0.67
FRA	2012	1.90	1.20	0.70	ITA	2004	1.30	0.67	0.63
FRA	2013	2.49	1.78	0.71	ITA	2005	1.00	0.40	0.60
FRA	2014	1.24	-0.06	1.30	ITA	2006	1.39	0.50	0.89
FRA	2015	1.00	0.00	1.00	ITA	2007	1.03	1.32	-0.29

Note: Table records budgetary impact of deficit-driven fiscal consolidation. ESP=Spain, FIN=Finland, FRA=France, GBR=United Kingdom, IRL=Ireland, ITA=Italy.

Table A1 (continued). Deficit-driven Fiscal Consolidation in 17 OECD Countries
(Percent of GDP)

Country	Year	Total	Tax	Spend	Country	Year	Total	Tax	Spend
ITA	2010	0.41	0.38	0.02	PRT	2006	1.65	1.10	0.55
ITA	2011	1.31	0.40	0.91	PRT	2007	1.40	0.50	0.90
ITA	2012	3.31	2.26	1.06	PRT	2010	1.11	0.61	0.51
ITA	2013	2.38	1.07	1.31	PRT	2011	3.78	1.86	1.92
ITA	2014	0.54	0.19	0.35	PRT	2012	5.01	1.25	3.76
JPN	1979	0.12	0.12	0.00	PRT	2013	5.23	3.01	2.22
JPN	1980	0.21	0.21	0.00	PRT	2014	1.67	0.15	1.52
JPN	1981	0.43	0.43	0.00	SWE	1984	0.90	0.21	0.69
JPN	1982	0.71	0.31	0.40	SWE	1993	1.81	0.42	1.39
JPN	1983	0.42	0.06	0.37	SWE	1994	0.78	0.19	0.59
JPN	1997	1.43	0.98	0.45	SWE	1995	3.50	1.40	2.10
JPN	1998	0.48	0.33	0.15	SWE	1996	2.00	0.80	1.20
JPN	2003	0.48	0.00	0.48	SWE	1997	1.50	0.60	0.90
JPN	2004	0.64	0.19	0.45	SWE	1998	1.00	0.40	0.60
JPN	2005	0.28	0.06	0.22	USA	1978	0.14	0.14	0.00
JPN	2006	0.72	0.45	0.27	USA	1980	0.06	0.06	0.00
JPN	2007	0.15	0.15	0.00	USA	1981	0.23	0.23	0.00
JPN	2014	1.13	1.13	0.00	USA	1985	0.21	0.21	0.00
JPN	2015	0.38	0.38	0.00	USA	1986	0.10	0.10	0.00
JPN	2019	0.25	0.25	0.00	USA	1988	0.85	0.39	0.46
JPN	2020	0.75	0.75	0.00	USA	1990	0.33	0.26	0.07
NLD	1981	1.75	0.53	1.22	USA	1991	0.58	0.29	0.29
NLD	1982	1.71	0.00	1.71	USA	1992	0.52	0.24	0.28
NLD	1983	3.24	0.49	2.75	USA	1993	0.32	0.08	0.23
NLD	1984	1.76	0.00	1.76	USA	1994	0.90	0.40	0.50
NLD	1985	1.24	0.00	1.24	USA	1995	0.53	0.20	0.33
NLD	1986	1.74	0.00	1.74	USA	1996	0.29	0.08	0.22
NLD	1987	1.48	1.48	0.00	USA	1997	0.30	0.06	0.24
NLD	1988	0.06	-0.69	0.75	USA	1998	0.15	0.00	0.15
NLD	1991	0.87	0.87	0.00	USA	2011	0.04	0.00	0.04
NLD	1992	0.74	-0.58	1.32	USA	2012	0.14	0.00	0.14
NLD	1993	0.12	-0.16	0.28	USA	2013	0.56	0.17	0.38
NLD	2004	1.70	0.40	1.30					
NLD	2005	0.50	0.20	0.30					
NLD	2011	0.30	0.10	0.20					
NLD	2012	0.50	0.10	0.40					
NLD	2013	0.60	0.10	0.50					
PRT	1983	2.30	1.35	0.95					
PRT	2000	0.50	0.00	0.50					
PRT	2002	1.60	1.20	0.40					
PRT	2003	-0.75	-0.75	0.00					
PRT	2005	0.60	0.52	0.08					

Note: Table records budgetary impact of deficit-driven fiscal consolidation. ITA=Italy, JPN=Japan, NLD=Netherlands, PRT=Portugal, SWE=Sweden, USA=United States.

Table A2. Deficit-driven Fiscal Consolidation in 14 Economies in Latin America and the Caribbean
(Percent of GDP)

Country	Year	Total	Tax	Spend	Country	Year	Total	Tax	Spend
ARG	1996	0.25	0.25	0.00	ECU	2018	3.30	1.00	2.30
ARG	1997	0.75	0.75	0.00	ECU	2019	1.00	-1.00	2.00
ARG	2018	1.50	0.00	1.50	GTM	1995	0.80	0.80	0.00
ARG	2019	2.40	0.00	2.40	GTM	1996	0.70	0.70	0.00
BOL	1995	0.90	0.90	0.00	GTM	2000	1.30	0.30	1.00
BOL	2004	2.00	2.00	0.00	GTM	2002	1.90	1.00	0.90
BOL	2005	4.10	4.10	0.00	GTM	2012	0.40	0.00	0.40
BRA	2015	0.80	0.30	0.50	GTM	2013	1.00	1.00	0.00
BRA	2017	0.90	0.24	0.66	JAM	1992	2.10	2.10	0.00
CHL	1990	0.50	0.50	0.00	JAM	1999	0.70	0.00	0.70
CHL	1991	0.17	0.17	0.00	JAM	2000	1.80	0.00	1.80
CHL	2003	0.60	0.20	0.40	JAM	2003	3.00	1.50	1.50
CHL	2004	0.40	0.40	0.00	JAM	2004	1.00	0.50	0.50
CHL	2008	-0.50	0.00	-0.50	JAM	2012	0.80	0.80	0.00
CHL	2014	0.10	0.10	0.00	JAM	2013	2.60	2.00	0.60
CHL	2015	0.18	0.18	0.00	JAM	2014	0.60	0.40	0.20
CHL	2016	0.31	0.31	0.00	MEX	1989	0.90	0.90	0.00
COL	2000	0.90	0.00	0.90	MEX	2010	0.60	0.60	0.00
COL	2003	1.10	1.10	0.00	MEX	2014	0.60	0.60	0.00
COL	2011	0.40	0.40	0.00	PER	1992	1.00	1.00	0.00
COL	2012	0.80	0.80	0.00	PER	2002	0.20	0.20	0.00
COL	2015	0.50	0.00	0.50	PER	2003	0.80	0.80	0.00
COL	2016	0.70	0.00	0.70	PER	2011	-0.38	-0.38	0.00
COL	2017	0.70	0.70	0.00	PER	2012	0.38	0.38	0.00
CRI	1990	1.50	1.50	0.00	PRY	1989	2.60	2.00	0.60
CRI	1991	3.10	3.10	0.00	PRY	2001	1.80	0.50	1.30
CRI	1992	0.50	0.50	0.00	PRY	2003	1.25	1.25	0.00
CRI	1993	-0.30	-0.30	0.00	PRY	2004	0.80	0.80	0.00
CRI	1994	-0.50	-0.50	0.00	PRY	2005	-0.60	-0.60	0.00
CRI	1995	1.80	1.00	0.80	PRY	2006	-0.70	-0.70	0.00
CRI	1996	0.30	0.30	0.00	PRY	2014	0.24	0.24	0.00
CRI	1997	0.40	0.00	0.40	PRY	2016	0.80	0.00	0.80
CRI	2016	0.40	0.20	0.20	URY	1990	1.70	1.70	0.00
DOM	2004	1.70	0.50	1.20	URY	1995	1.65	0.75	0.90
DOM	2006	-0.80	-0.80	0.00	URY	1996	0.25	0.25	0.00
DOM	2007	0.90	0.90	0.00	URY	2000	0.80	0.00	0.80
DOM	2011	0.64	0.44	0.20	URY	2002	3.28	1.58	1.70
DOM	2013	3.80	1.80	2.00	URY	2003	1.63	1.43	0.20
ECU	1990	0.32	0.32	0.00	URY	2004	-0.50	-0.50	0.00
ECU	1993	2.20	1.70	0.50	URY	2005	-0.90	-0.90	0.00
ECU	2000	0.50	0.50	0.00	URY	2015	0.60	0.00	0.60

Note: Table records budgetary impact of deficit-driven fiscal consolidation. ARG = Argentina, BOL = Bolivia, BRA = Brazil, CHL = Chile, COL = Colombia, CRI = Costa Rica, DOM = Dominican Republic, ECU = Ecuador, GTM = Guatemala, JAM = Jamaica, MEX = Mexico, PER = Peru, PRY = Paraguay, URY = Uruguay.

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