CHAPTER 2

PUBLIC SENTIMENT MATTERS: THE ESSENCE OF SUCCESSFUL ENERGY SUBSIDIES AND PENSION REFORMS

Introduction

Many countries need a strategic pivot to reduce debt and create fiscal space (Chapter 1). Achieving this requires concerted efforts to rationalize public budgets and reform expenditure programs. This chapter focuses on two key programs in national budgets: energy subsidies, which are particularly relevant for emerging markets and low-income countries, and public pensions, which are more pertinent to advanced economies and emerging markets. Reforms in these areas can generate fiscal savings and promote inclusive growth by enhancing efficiency, increasing labor force participation, and reducing inequality.

Explicit energy subsidies, which reflect undercharging for energy supply costs, represent a significant fiscal cost to the government. This cost exceeds 1½ percent of GDP in emerging markets and low-income countries (Figure 2.1, panel 1), surpassing social spending for poor households. Implicit subsidies, which represent undercharging for environmental costs and forgoing consumption tax revenues, are even larger. Countries use energy subsidies to ensure energy access, stabilize prices, support households, promote development, and redistribute resource wealth (Beblawi and Luciani 2015; Chelminski 2018). But subsidies are ineffective tools to address these concerns. Reducing energy subsidies can strengthen public finances, eliminate price distortions, promote efficient energy use, and attract investments in energy-efficient technologies, fostering long-term growth (von Moltke, McKee, and Morgan 2004; Burniaux and others 2009; Ellis 2010). Rationalizing these often-regressive subsidies along with implementing mitigating measures can reduce inequality (Abdallah and others 2015; Coady, Flamini, and Sears 2015).

Pension spending accounts for about 8 percent of GDP in advanced economies and 4 percent in emerging market economies, projected to rise by 2 to 4 percentage points of GDP by 2050 (Figure 2.1, panel 2). A key factor driving the increase is rising life expectancy at retirement, which has grown in the last two decades and is expected to continue increasing in the future (OECD 2023). Without reforms, pension spending is likely to increase public debt and crowd out other essential spending. Closing the growing gap between life expectancy and retirement ages is critical to supporting economic growth by encouraging older individuals to work longer (Echevarria 2004; Catalán and Magud 2017; Geppert and others 2019; Zhang and Cao 2024). If retirement ages are not adjusted, pension systems may face higher contribution rates (which discourage labor supply) or lower benefits (raising risks of old-age poverty).

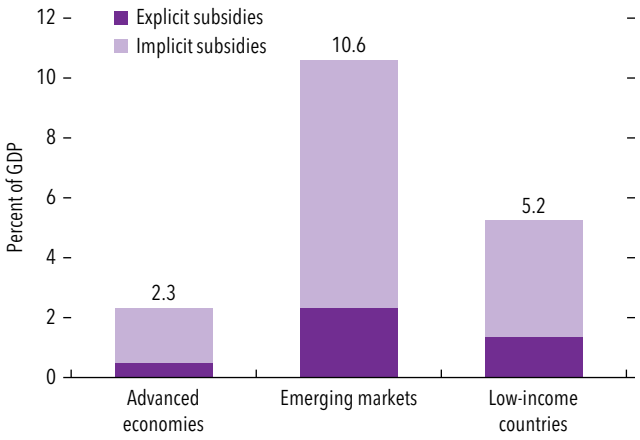
Reforms to these programs are often contentious, making it difficult to secure social and political acceptability. They can incite social unrest, as evidenced in Nigeria regarding energy subsidies and in France regarding pensions. Although the costs of reform are immediate and tangible, the benefits—such as increased efficiency, employment, and economic growth—are diffuse and less visible (Galasso and Profeta 2004; Acemoglu and others 2015; Chapter 3 of the October 2024 *World Economic Outlook*). The short-term costs of subsidy reforms are immediate, noticeable, and widespread (Cheon, Urpelainen, and Lackner 2013; Couharde and Mouhoud 2020), complicating their implementation. Pension reforms can also provoke backlash, as they directly affect the financial well-being of an increasing number of elderly households (Casamatta and Batté 2016; Bremer and Bürgisser 2022; Ortiz and others 2022; Barilari, Mastrorocco, and Paradisi 2024). Moreover, their intergenerational nature leads to differential costs and benefits across cohorts of workers and retirees (Fouejieu and others 2021). Furthermore, perceptions of fairness regarding these measures, reflecting both individual and broader concerns, can significantly affect public reactions.[1]

Against this backdrop, this chapter explores how these reforms can be designed to gain social and

[1]Perceptions of fairness regarding energy subsidy and pension reforms vary across regions, shaped by cultural, economic, and political factors. In resource-rich nations, energy subsidies are often seen as rightful benefits from natural wealth (Hoy and others 2023) In Europe, fairness within pensions often centers on intergenerational equity, with concerns that younger generations bear most of the costs.

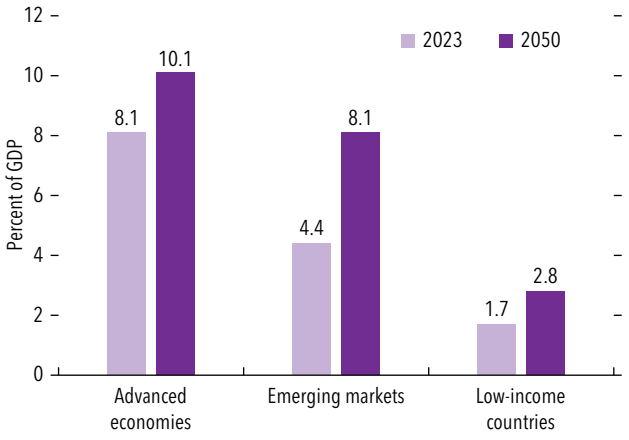
Figure 2.1. Energy Subsidy and Pension Expenditures and Inefficiencies

1. Energy Subsidies, 2022



Source: Black and others 2023.
Note: Explicit subsidies correspond to undercharging for energy supply. Implicit subsidies involve undercharges for environmental costs and forgone energy consumption taxes.

2. Pension Expenditures, 2023 and 2050



Source: IMF staff calculations.
Note: The figure plots current and projected public pension expenditure levels in 2023 and 2050 by income group.

political acceptance.[2] Specifically, the chapter addresses the following key questions:

1. How have energy subsidies and pension reforms evolved across regions and countries over time? What patterns can be observed in the types and intensity of reforms, as well as their durability or reversals?
2. What factors influence reforms during their announcement, implementation, and sustainment or reversal? How does the sentiment of key stakeholders impact the reform process?
3. How do economic conditions, institutions, governance, fiscal policy, and reform design affect stakeholder sentiment and reform acceptability, and how do these factors interact?

The chapter uses novel data and techniques to answer these questions. The key findings are as follows:

- *Energy subsidy and pension measures are common, but significant changes—such as major reductions in subsidies or raising retirement ages—are rare*. In emerging markets and low-income countries, energy subsidy reforms (such as adjustments to diesel prices and utility tariffs) occur frequently because subsidies are higher and more burdensome on public finances. However, these measures are often short-lived, resulting in minor price changes and reversals. In advanced economies, pension measures are also common, particularly in countries with older populations and more developed pension systems. Major adjustments, such as changing the statutory retirement age, are infrequent and typically follow systemic crises. Changes in retirement ages tend to be gradual, with reversals occurring in about 15 percent of cases, often prolonging implementation.
- *Public sentiment is a crucial driver of energy and pension reforms.* Although economic conditions—lower growth, higher fiscal deficits, and spikes in oil prices—influence the timing of reforms, public sentiment is one of the strongest predictors of policy measures. Improving the sentiment toward reforms of households, civil society organizations (CSOs), unions, and opposition parties, increases the likelihood of reform success. Addressing stakeholder concerns is vital for advancing ambitious policy measures.
- *Reform design, timing, accompanying measures, and broader governance all influence sentiment toward reform*. First, more gradual reforms typically result in less negative sentiment. Second, measures announced and implemented during periods of higher growth tend to garner a more favorable response. Third, redistribution policies and transfers can alleviate public apprehension about reforms, especially for energy subsidies. Fourth, trust in public institutions and accountability can mitigate negative sentiment. Importantly, these factors interact. For example, strong governance and supportive measures can ease public concerns during major and front-loaded reforms in challenging

[2]Measures refer to discretionary policy actions, such as fuel price adjustments or changes to statutory retirement ages. They exclude changes in fuel subsidies attributable to changes in international fuel prices or pension adjustments attributable to longevity. The terms "reforms" and "measures" are used interchangeably. However, "reforms" may also refer to a combination of measures (IMF 2015).

economic conditions. Last, effective communication is crucial. Clear messaging builds trust and keeps stakeholders informed and engaged throughout the reform process.

Historical Experience with Energy Subsidy and Pension Measures

This chapter constructs two novel reform databases. The Energy Subsidy Reform Measures database covers more than 170 countries from 1990 to 2023, detailing fuel and utility price changes, measures for state-owned enterprises, and reform characteristics, supplemented with granular retail fuel price data and information from more than 1.4 million news articles.[3] The Global Pension Reform database spans 134 countries from 1960 to 2024, focusing on pension age measures supported by insights from 600,000 news articles. Both databases use news articles to identify the timing of measures and stakeholders' reactions, leveraging large language models and staff expertise for comprehensive information on reform measures (see Online Annex 2.1 for details). The databases yield several insights.

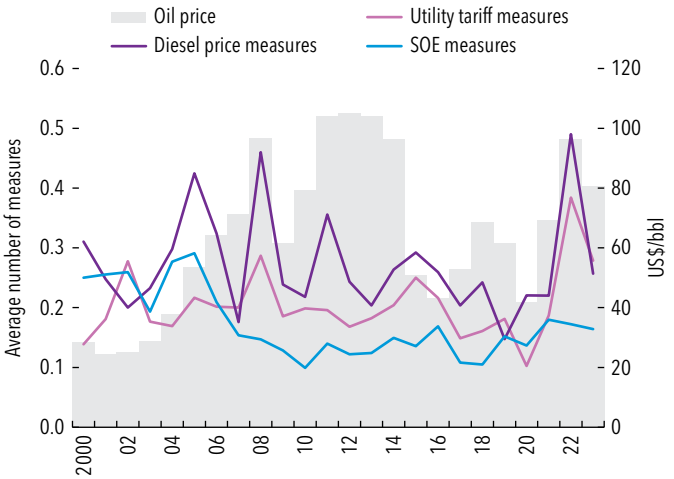
- *Energy subsidy measures are common*, with countries implementing an average of 0.6 measures per year. Fuel price increases, especially for diesel, often spike during oil price peaks, averaging 0.3 measures per country in 2008 and 2022 (Figure 2.2, panel 1).[4] Approximately 23 percent of countries enact at least one diesel price measure, and 19 percent implement a utility tariff measure annually. Low-income countries and emerging markets, particularly in Africa and the Middle East and Central Asia, tend to implement these measures more frequently because of higher subsidies (Figure 2.2, panel 2). Most measures consist of price increases, but in 2022, many European economies implemented utility price decreases in response to electricity market shocks from Russia's war on Ukraine (Box 2.1).

[3]The data capture measures corresponding to price changes in countries with administratively set prices and changes in pass-through in countries with flexible prices. This includes substantial changes that often precede the adoption of an automatic pricing mechanism or price liberalization. The Energy Subsidy Reform Measures database also provides insights into reform design, communication, mitigation strategies, and automatic pricing mechanisms, albeit with limited coverage. See Online Annex 2.1.

[4]Fuel prices respond more quickly to positive than negative international oil price shocks (Kpodar and Abdallah 2017). The correlation between diesel price increase measures and international oil prices is higher for oil-importing economies.

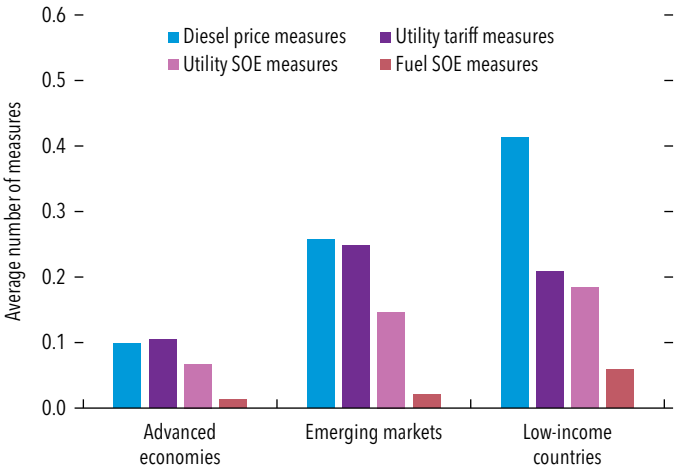
Figure 2.2. Historical Experiences with Energy Subsidy Measures

1. Average Number of Measures per Year



Sources: Energy Subsidy Reform Measures database; Global Retail Fuel Price database; Global Petrol Prices database; and IMF staff calculations.
Note: The figure plots the average number of diesel price measures, utility tariff measures, and state-owned enterprise (SOE) measures per year. Diesel measures are implemented. Utility tariff measures could be either implemented or planned. The average is calculated as the total number of measures per year across countries divided by the number of countries that had a staff report or fuel price data. The units for the right-hand vertical axis are US dollars per barrel of crude oil (US$/bbl).

2. Average Number of Measures per Income Group



Sources: Energy Subsidy Reform Measures database; and IMF staff calculations.
Note: The figure plots the average number of measures for advanced economies, emerging markets, and low-income countries between 2000 and 2023. The average is calculated as the total number of measures per year across countries divided by the number of countries within each income group that had a staff report or fuel price data. SOE = state-owned enterprise.

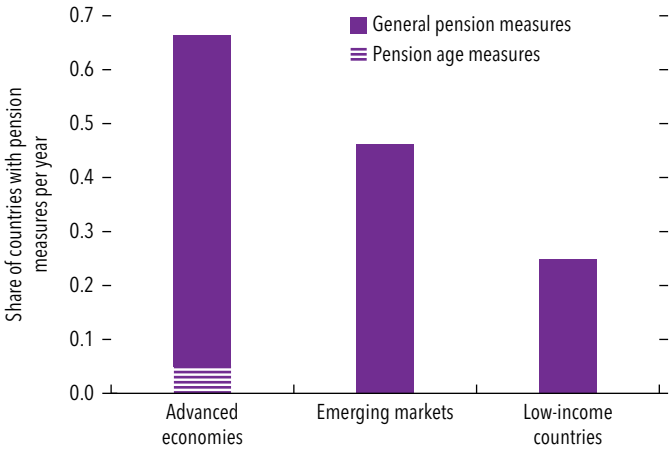
- *Fuel price measures are typically ad hoc and minor*, with median price changes of about 5 percent. Measures occurring within 12 months of one another are less frequent, but they result in a median price increase of 23 percent when combined. About 17 percent of energy subsidy measures are reversed,

Figure 2.3. Historical Experiences with Pension Measures

1. Share of Countries with Pension Measures, 1990–2023

Sources: Global Pension Reform database; and IMF staff calculations.
Note: The figure shows the share of countries with pension measures over time in a sample of 134 countries and identifies the share of advanced economies (AEs) with pension age measures over time.

2. Share of Countries with Pension Measures, by Income Group



Sources: Global Pension Reform database; and IMF staff calculations.
Note: The figure presents the average share of countries with pension measures per year and within each income group. The figure plots the average over 2000–23 for a sample of 134 countries. Pension age measures are reported only for advanced economies.

usually within eight months, offsetting most of the price increase (Online Annex 2.1).[5]

- *Pension measure*s are quite common, with about 50 percent of countries implementing such measures annually (Figure 2.3, panel 1). Advanced economies, particularly in Europe, tend to enact these measures more frequently, reflecting the rapid aging of the population and well-established pension systems in these nations.

  Adjustments to statutory retirement ages, although often central to the pension reform discussions, represent a small fraction of reforms—about 1 out of 10 of overall pension measures in advanced economies (Figure 2.3, panel 2). Most measures were made in response to the major financial crises of 2009 and 2011 and typically involved parametric adjustments to benefits, contributions, and coverage, as well as some systemic pension reforms.
- *Pension age measures are typically implemented gradually,* taking an average of 10 years to increase retirement ages by 3.7 years.[6] About 64 percent of these measures begin to raise retirement ages within two years of legislation. Some countries, including *The Netherlands*, *Portugal*, and *Sweden*, have introduced automatic adjustments to retirement age changes based on longevity gains, reducing the need for frequent changes.
- *Full reversals of pension age measures are rare*. About 15 percent of pension age measures are fully or partially reversed. One-third of reversals correspond to countries abolishing legislated increases in retirement ages fully, typically within four years of the legislation. The remainder represents delays in implementation timelines or exceptions for early retirement—such as *Türkiye* in 2023 and *Germany* in 2014—which partially undermine the intended effects of the original legislation (Online Annex 2.1).

Factors Driving Reforms

This section examines the various drivers of energy subsidy (fuel price) and pension (age) measures, including macroeconomic, fiscal, and political factors, as well as stakeholder sentiment. It evaluates how these factors influence the announcement, implementation, and legislation of new measures (fuel price and retirement age changes) and their durability.

Conceptual Framework

The conceptual framework distinguishes between stages of the reform process (Figure 2.4).

[5]Reversals are defined as measures that decrease fuel prices after previous increases. Even when measures are not reversed, their fiscal impact can be diluted by exogenous factors (Martinez-Alvarez and others 2022). For instance, fluctuations of exchange rates or international oil prices can change the size of subsidies. In the data, most reversals are followed by new measures within two years.

[6]Larger and less gradual pension age increases have been legislated for women, who traditionally have had lower retirement ages than men, and their pensions have been increasingly aligned with those of men.

Figure 2.4. Reform Process

Source: IMF staff.

The framework analyzes how various drivers—macroeconomic conditions, institutional environments, and public sentiment—affect reforms at different stages (Table 2.1). The framework simplifies the reform process into distinct stages (Dermont and others 2017). In reality, reforms may be anticipated before governments announce their intention to undertake reforms, may take years to implement, and may not follow a linear path. When changes in the law are necessary to advance policy measures, such as with pensions, the enactment of legislation becomes a crucial step between announcement and implementation.[7]

- *Macroeconomic and social conditions*. High oil prices, currency depreciation, and population aging create spending pressures likely to prompt reform announcements (Stocker and others 2015; Bettarelli and others 2024). High inflation and weak economic growth may compel policymakers to implement reforms (Dornbusch and Edwards 1991). Conversely, strong growth, low inflation, and improved fiscal indicators can support reforms because the population is better positioned to cope with associated costs (Bruno and Easterly 1998; Clements and others 2013). High levels of poverty and inequality can limit households' ability to cope with the cost of reforms (Morrisson 1996).
- *Institutional and political environment*. Key institutional characteristics—such as government accountability and governance—are critical for citizens to feel informed about the use of public resources, thus building trust in reform initiatives (Acemoglu and Robinson 2012). Electoral cycles can influence the timing of reforms, as policymakers may avoid changes before elections (Ciminelli and others 2019; Alesina and others 2024). Strong political mandates enable ambitious reforms, although weakened support may lead to reversals (Alesina and Perotti 1997). Transparency and effective communication strategies are crucial for fostering public trust and understanding of the reform process and its potential impact (Tompson 2009).
- *Sentiment regarding reforms*. The interaction between macroeconomic, institutional factors, and reform design shapes public sentiment and influence outcomes (Ceron 2017; Mohl and others 2021; Penney and others 2023; Anisimova and Patterson 2024; Chapter 3 of the October 2024 *World Economic Outlook*). Although concerns about energy subsidies and pensions—such as high costs, inefficiencies, and inequities—may not boost support for reforms, stakeholder input is essential once governments announce plans to modify expenditure programs. This input shapes the characteristics of reforms, including intensity and phasing, which can make proposals more acceptable. Public acceptance is also critical for the durability of reforms.

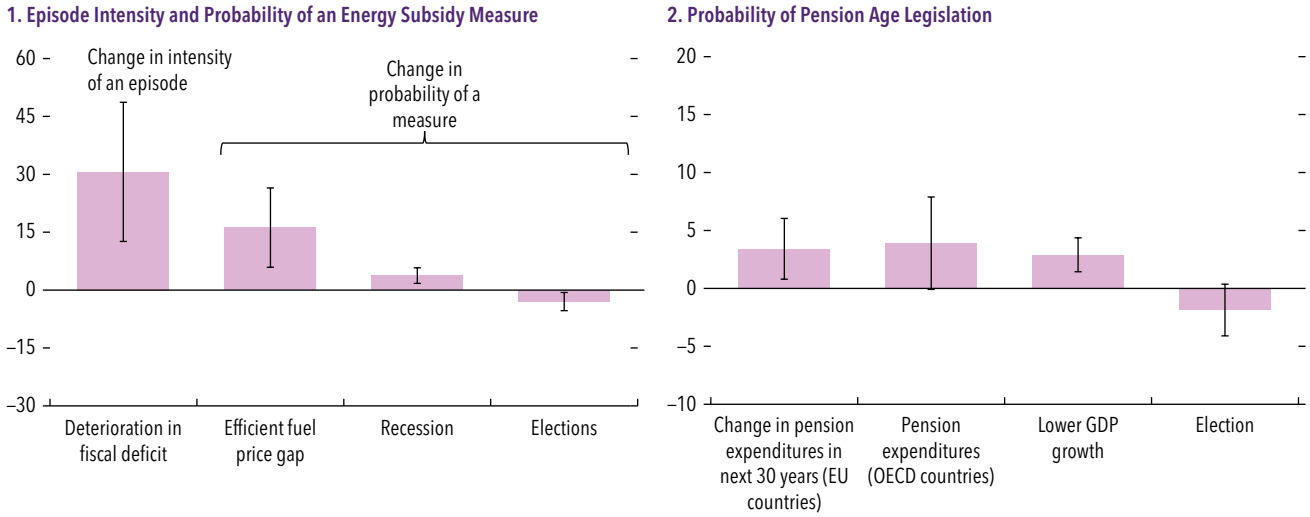
Table 2.1. Drivers of Reform Measures

		Stages of Reform Measure Process		
		From Status Quo to Announcement	**From Announcement to Implementation**	**From Implementation to Stay/Reverse**
Key factors affecting the reform process	**Macroeconomic factors**	Weak macroeconomic conditions, including fiscal situation, provide impetus for reform.	Larger imbalances may force the implementation of substantial reforms.	Strong macroeconomic conditions can make reforms more palatable to the public.
	Institutional and political environment	Reform timing could be influenced by political cycles.	Building trust can facilitate implementation of reforms.	Strong institutional capacity facilitates the durability of reforms.
	Sentiment regarding reforms	Public appetite for change can facilitate the introduction of reform proposals.	Stakeholder inputs can shape reform characteristics, making reforms more acceptable.	Strong opposition may affect the durability of reforms.

Source: IMF staff.

[7]Pension measures typically require legislative changes, whereas energy price measures are usually administratively enacted.

Figure 2.5. Factors Affecting Probability of a Measure
(Percentage point change)



Sources: Energy Subsidy Reform Measures database; Global Pension Reform Database; and IMF staff estimates.
Note: Panels 1 and 2 cover the period 2000–23. Panel 1 plots the coefficients from regressions between the price intensity of diesel reform episodes (first bar) and the probability of a diesel price increase measures (other bars) on standardized values of regressors. Panel 2 plots the association between legislation on pension age measures and standardized values of regressors. Black bands represent 90 percent confidence intervals. See Online Annex 2.2 for details. EU = European Union; GDP = gross domestic product; OECD = Organisation for Economic Co-operation and Development.

Stylized Facts

The Role of Macroeconomic and Political Factors

The likelihood of announcing or enacting energy subsidy and pension measures is shaped by the macroeconomic and institutional environment. For instance, about two-thirds of price increase announcements have occurred when crude oil prices have risen, with one-third happening during significant oil price surges. Higher-intensity diesel reform episodes often follow deteriorating fiscal balances (Figure 2.5, panel 1).[8] Recessions are associated with a 4 percentage point increase in diesel prices, although an increase in the efficient fuel price gap—the difference between efficient prices (including supply, environmental, and other costs) and retail diesel prices—correlates with a rise in the likelihood of a diesel price hike, especially in oil-importing economies. Fuel price increases are less common during election years but tend to rise afterward. The sustainability of reform measures is approximately two months longer when there is a higher efficient fuel price gap, stronger economic growth, and improved fiscal balance (Online Annex Figure 2.2.1, panel 1).

Increases in retirement ages are more frequent following periods of low growth (Beetsma and others 2020; Romp and Beetsma 2023). Specifically, a one-standard-deviation decrease in GDP growth is associated with a 2.9 percentage point increase in the probability of a pension age reform measure (close to 60 percent of the unconditional probability of the measure). During the euro debt crises of 2010–12, pension age reforms occurred twice as often compared with the average from 2000 to 2023, as seen in *Italy* (2011) and *Spain* (2012). Higher pension spending as a share of GDP positively correlates with a greater likelihood of pension age legislation. Similarly, pension age legislation is more likely when pension spending is projected to increase (Figure 2.5, panel 2).[9] Conversely, pension measures are less frequent in election years.

The Role of Sentiment

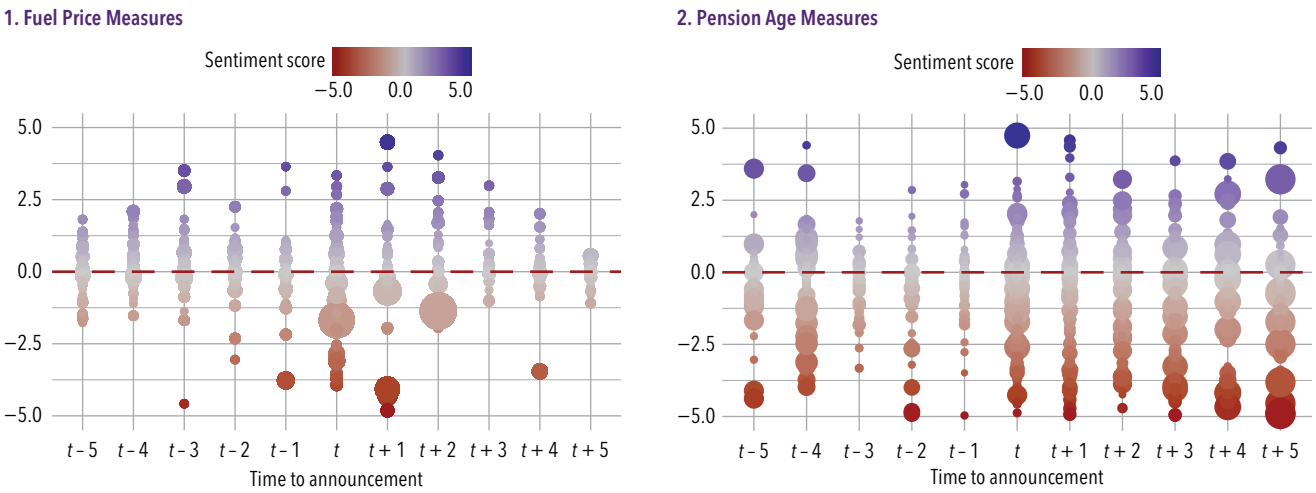
This subsection first describes the construction and measurement of stakeholder sentiment regarding reforms. It then evaluates how public sentiment influences the reform process.

- *Measuring sentiment.* This chapter develops a novel metric of public perceptions of reforms by analyzing print media articles from Factiva (Online Annex 2.3). Sentiment serves as a proxy for public opinion, capturing immediate reactions to policy

[8]Similarly, deteriorations in the current account and increases in debt-to-GDP ratio are associated with higher-intensity reforms.

[9]Evidence shows that fiscal considerations are the most frequently mentioned reason for retirement age reforms (Online Annex 2.1).

Figure 2.6. Overall Sentiment around the Time of Announcement



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The figure illustrates sentiment trends around the time of the announcement. The horizontal axis represents the time period, with time *t* being the month of the announcement, and $t - 5$ to $t + 5$ indicating months before and after the announcement. The vertical axis indicates the scaled sentiment score (average weighted sentiment of all stakeholders divided by the country-specific standard deviation). The size of the bubble represents the number of articles while the color indicates the direction of sentiment, with red representing negative sentiment and blue representing positive sentiment.

changes and broader perspectives shaped by cultural, political, and economic contexts. Unlike traditional measures of public support, such as individual-level surveys, print media offers real-time insights into diverse stakeholder opinions as reform events unfold. This chapter uses large language models to extract, classify, and quantify sentiment from direct quotes attributed to key stakeholder groups, including households, unions, opposition parties, private sector groups, CSOs, and oil companies.

Sentiment related to reforms is assessed on a scale from –5 (most opposed) to +5 (most supportive), identifying key concerns for each stakeholder regarding reforms such as inflation, household income, and economic growth. These metrics allow for monitoring sentiment throughout the reform process and assessing the dispersion of sentiment among stakeholders. Print media are valuable for understanding the acceptability of reforms because they reflect and shape public discourse, influencing policymakers and stakeholders. However, they also have some limitations, including selection bias, limited coverage where other media (such as radio) are more dominant, and challenges in interpreting context (Gentzkow and Shapiro 2006).[10] In addition, although print media offer perspectives on past reforms, social media also contributes to understanding public sentiment (Loureiro and Alló 2020; Kastrati and others 2023).

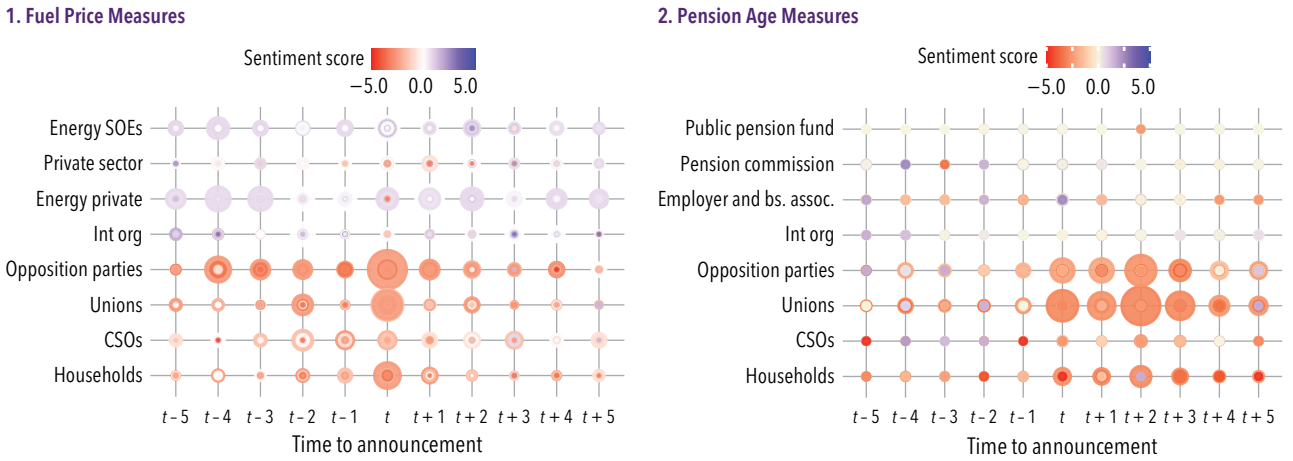
- *Evaluating sentiment at different reform stages.* Following announcements of fuel price and pension age measures, sentiment declines, turning negative and more dispersed, with stakeholders becoming increasingly vocal (Figure 2.6, panel 1). Announcements of fuel price measures lead to heightened negative sentiment lasting up to three months, although for pension reform announcements negative sentiment persists for at least six months (Figure 2.6, panel 2).[11]

Households, unions, and opposition groups are vocal during and after the announcements of fuel price and pension measures (Figure 2.7). CSOs also express strong opinions on fuel price measures. Following implementation sentiment remains negative for fuel price measures, whereas stakeholders remain muted after the enactment of pension legislation (Online Annex 2.4). Sentiment of households and unions improves after fuel price reversals, but they are more muted regarding reversals of pension age measures.

[10]Several studies have used print media for economic analysis (Tetlock 2007; Shapiro, Sudhof, and Wilson 2022).

[11]The volume of published articles on subsidies and pensions increases three to four times before and during the implementation of fuel price measures and the announcement and introduction of pension age legislation (Online Annex 2.3).

Figure 2.7. Sentiment across Stakeholder Groups versus Sentiment around the Time of Announcement

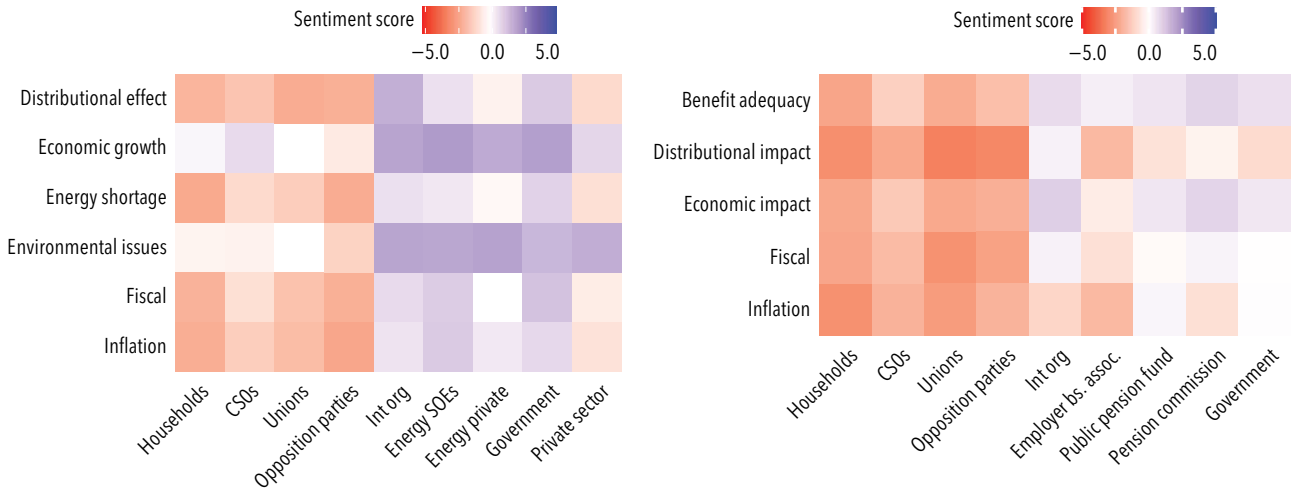


Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The figure shows sentiment across stakeholder groups over time relative to an announcement month for fuel price measures (panel 1) and pension measures (panel 2). The horizontal axis represents the timeline, with *t* being the month of announcement and $t - 5$ to $t + 5$ indicating months before and after the announcement. The vertical axis lists the stakeholder groups. The size of the bubbles reflects the frequency of sentiment, while the color indicates its direction, with red representing negative sentiment and blue representing positive sentiment. Scaled sentiment is the average weighted sentiment of all stakeholders divided by the country-specific standard deviation.
CSOs = civil society organizations; Employer bs. assoc. = employer and business associations; Int org = international organizations; SOEs = state-owned enterprises.

Regarding fuel price measures, households, CSOs, and unions are concerned about the cost of living, distributional impacts, fiscal issues, and energy shortages. The government, oil companies, and international organizations maintain positive sentiment across topics, while the private sector has mixed sentiment (Figure 2.8, panel 1).

For retirement-age measures, households, opposition parties, and unions are negative about the distributional impact and adequacy of benefits. The government, international organizations, and pension commissions express more positive sentiments (Figure 2.8, panel 2). Word clouds show how households prioritize income effects (Figure 2.9).

Figure 2.8. Stakeholder Concerns about Reforms

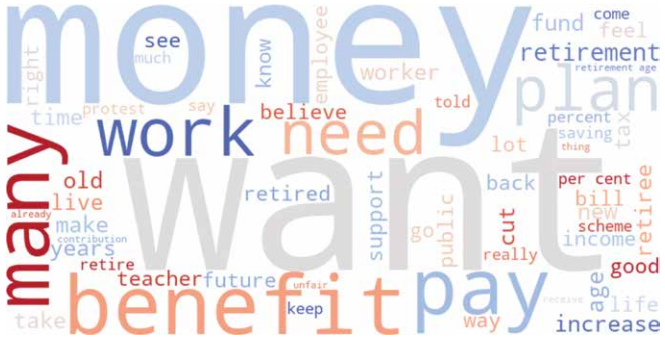


Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The figure shows the distribution of concerns raised by stakeholders during the announcement of fuel price measures (panel 1) and pension measures (panel 2). Each block represents a concern for each stakeholder, while the color of the block reflects the direction of sentiment. CSOs = civil society organizations; Employer bs. assoc. = employer and business associations; Int org = international organizations; SOEs = state-owned enterprises.

Figure 2.9. Word Cloud Representation of Household Perspectives about Reforms

1. Fuel Price Measures

2. Pension Age Measures



Sources: Factiva; and IMF staff estimates.
Note: The word clouds illustrate the most frequently mentioned words from quotes in English-language print media articles discussing household perspectives, excluding common stop words, reform-related keywords, and nonalphabetic characters.

Empirical Analysis

Which factors—macroeconomic, institutional, political, or stakeholder sentiment—are the most significant predictors of reforms? How does their importance vary across the stages of the reform process? This section uses a machine learning method to analyze large data sets and identify patterns and complex relations between variables (see Online Annex 2.2). This approach allows for evaluating the key predictors at various reform stages and comparing their importance. Using an instrumental variable approach, the section then examines the causal effect of sentiment on the implementation and size of policy measures.

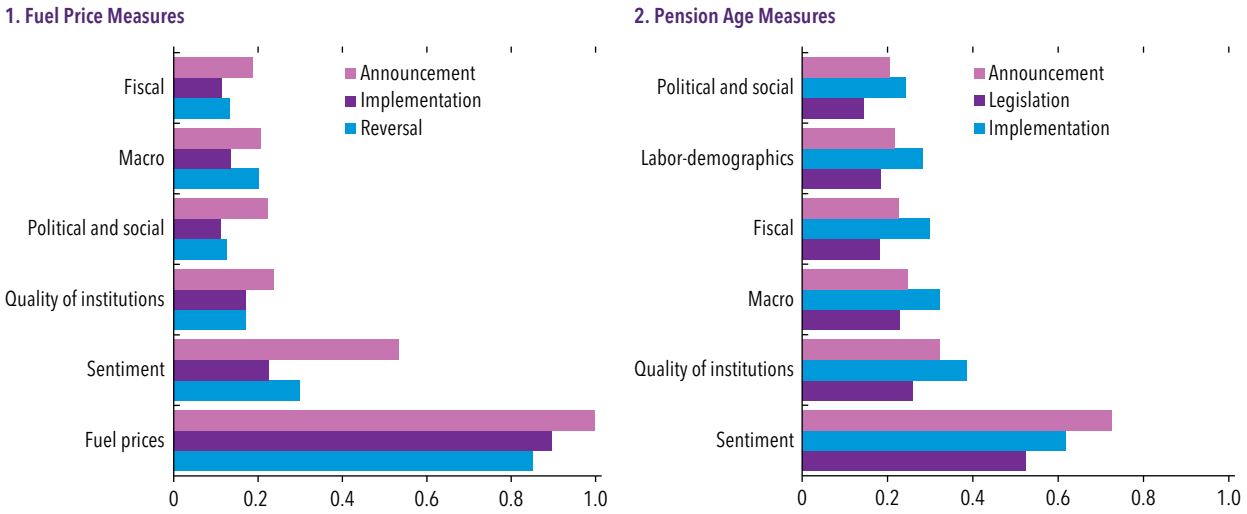
Among macroeconomic, institutional, and political factors, sentiment is a key predictor across reform stages for energy subsidy and pension reforms. Relevant variables include IMF program indicator, GDP growth, inflation, fiscal deficits, fiscal rules and council's strength, governance indicators, election cycles, political polarization, life expectancy (for pensions), and international crude oil price (for fuel price measures). Figure 2.10 shows the average importance of regressors in each group, with scores from 0 to 1, where 1 is the most important predictor. For energy subsidy reforms, sentiment ranks second to fuel price growth, consistent with a correlation between international oil prices and energy subsidy measures. Although reversals are fewer and therefore more challenging to predict, sentiment remains important for fuel price measure reversals. For pension age measures, sentiment is the primary predictor during the announcement and legislation stages, but it is less relevant during implementation (when retirement age changes take effect) suggesting diminished stakeholder influence after pension legislation is enacted.

Some stakeholders, such as households, CSOs, unions, and opposition groups, tend to exhibit negative sentiment about reforms while the government typically adopts a positive stance (as shown in Figure 2.8). The results in Online Annex 2.2 show that the sentiment of both negatively and positively inclined stakeholders has predictive value for reform measures. This observation has two main implications. First, government sentiment regarding reform significantly influences the likelihood of measures, reflecting a tendency of governments to speak positively about reforms to build consensus and demonstrate ownership. Second, the concerns of stakeholders with negative sentiment—households, CSOs, unions, and opposition groups—have implications for advancing reforms.

Although sentiment is a strong predictor of all stages of the policy process, sentiment can be influenced by economic and political factors. Results of an empirical approach to isolate the causal effect of sentiment on reforms suggest that improving the sentiment of stakeholders, who generally oppose measures significantly, increases the likelihood of advancing those measures. The effects are economically significant, with a substantial increase in sentiment (two standard deviations) raising the probability of an announcement by 30 percent and the probability of implementation by 10 percent (Figure 2.11, panel 1; Online Annex 2.2).[12]

[12]The analysis uses sentiment in trading partners as the instrument for domestic sentiment; see Online Annex 2.2 for details.

Figure 2.10. Average Importance Score for Predicting Reform Stages



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: Importance scores show the relative importance of each regressor for the model's predictive performance. All scores were normalized, divided by the maximum score, so that 1 is the maximum importance and 0 means no importance. The panels show simple averages of the importance of individual regressors.

Sentiment also plays a role in the implementation of episodes with multiple measures, boosting their probability by 13 percent. Improved sentiment also leads to larger policy actions; fuel price changes are, on average, 37 percent larger following significant improvements in sentiment (Online Annex 2.2). Similar results are found for announcements and legislation of pension reforms, although less precisely estimated (Figure 2.11, panel 2). In contrast, once pension age legislation is enacted, sentiment has limited influence on its implementation.

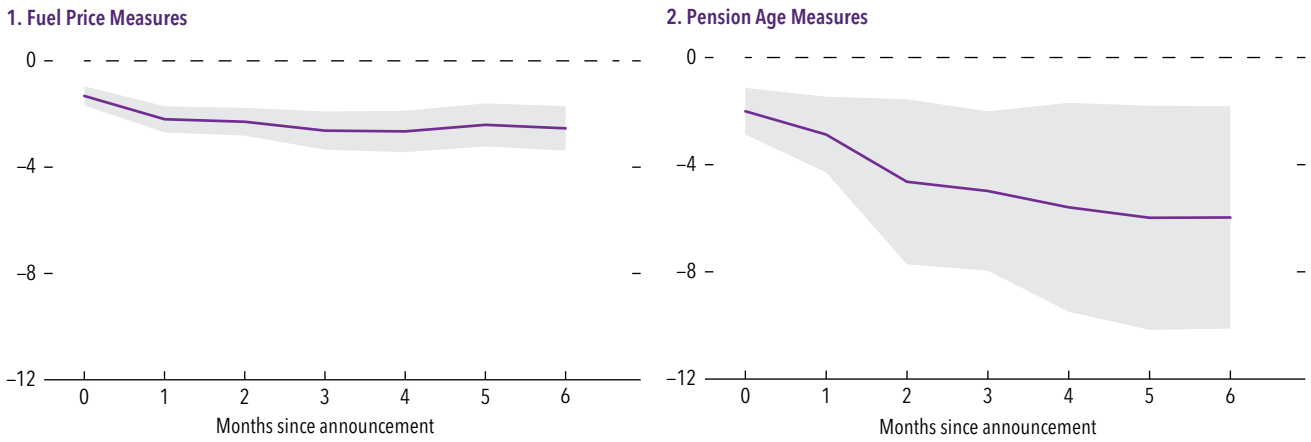
Policies and Reform Design to Improve Public Acceptance of Reforms

This section examines the key factors influencing sentiment regarding these measures and discusses strategies for improving public acceptance, drawing

Figure 2.11. Effect of Sentiment on the Stages of Measures
(Percent)

Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The panels show the average marginal effects of a two-standard-deviation shock to sentiment. These are estimated using an instrumental variable approach with a probit model, where domestic sentiment is instrumented with sentiment in trading partners. The analysis refers to stakeholders with negative average sentiment regarding fuel price and pension measures, that is, households, unions, civil society organizations, and opposition groups. The analysis of pension measures focuses on advanced economies. Black bands represent 90 percent confidence intervals.

Figure 2.12. Impact of Measure Announcement on Stakeholder Sentiment



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The impulse response functions illustrate the cumulative impact of fuel price and pension age measure announcements on stakeholder sentiment (households, civil society organizations, unions, and opposition groups). The estimation accounts for baseline sentiment and includes stakeholder-by-country and stakeholder-by-year fixed effects (Online Annex 2.4).The regression analysis is conducted on a pooled stakeholder sample, covering 194 economies in the case of fuel price measures and 31 advanced economies in the case of pension measures. Standard errors are clustered at the country level. Shaded bands represent 90 percent confidence intervals.

from empirical analysis (Online Annex 2.4) and case studies (Online Annex 2.5).

Factors Influencing Sentiment Regarding Reforms

The empirical analysis consists of three steps. First, it quantifies the response of sentiment to reform measures. Second, it examines how reform design and macroeconomic and institutional conditions shape sentiment, assessing the average response of sentiment to changes in relevant conditions as well as heterogeneity across countries. Third, it assesses interactions among these variables to show how average responses can differ based on mediating factors such as reform design and governance.

Following the announcement of energy subsidy and pension age measures, media debate intensifies, making the months after an announcement critical for the reform process. Results in Figure 2.12 indicate that announcements typically trigger negative sentiment, especially among stakeholder groups most opposed to these reforms—households, unions, opposition parties, and CSOs. For fuel price measures, sentiment declines by more than one standard deviation one month after the announcement (Figure 2.12, panel 1). Announcements to increase the retirement age generate even sharper declines across stakeholders, with average sentiment deteriorating progressively over time (Figure 2.12, panel 2).

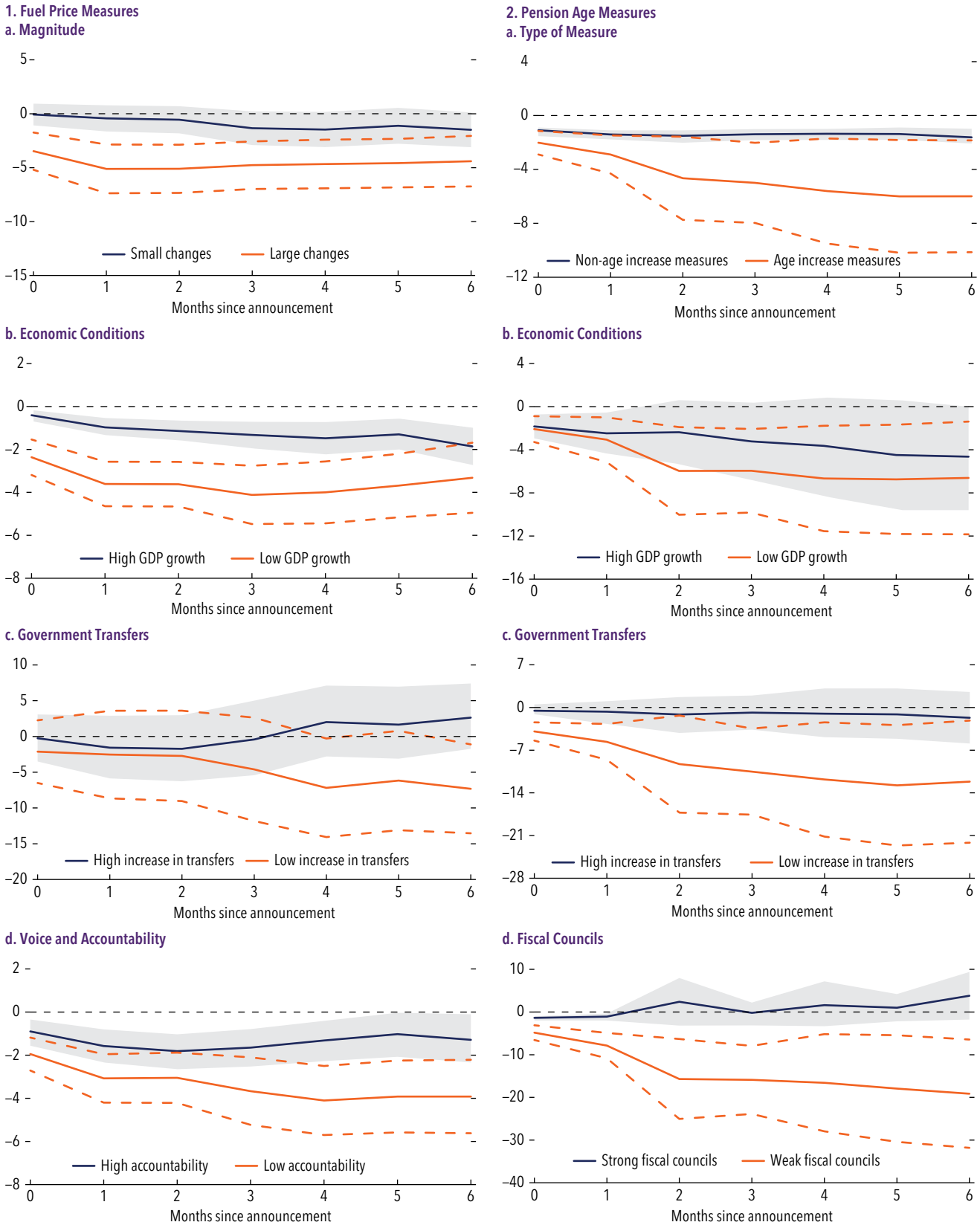
These responses, however, mask significant variation across countries and periods, influenced by reform design, structural characteristics, and accompanying policies. The following discussion examines the differing roles of these factors, drawing on empirical analysis, country experiences, and the extant literature.

Reform Design

The magnitude and phasing of fuel price adjustments significantly influence stakeholder sentiment. A modest fuel price hike (as implemented in *Colombia* in 2022) has a minimal impact on sentiment. In contrast, announcing a substantial price increase (as implemented in *Sri Lanka* in 2012) triggers a sharp and sustained decline in sentiment, with stakeholder sentiment deteriorating by nearly fourfold compared with initial levels (Figure 2.13, panel 1a). Similarly, gradual fuel price increases, on average, do not yield statistically significant negative effects, whereas more abrupt changes result in heightened resistance, amplifying negative reactions by up to four times (Online Annex 2.4). Small changes in pension ages, as in the 2007 pension reform in *Germany*, also lead to less negative sentiment.[13] In addition, sentiment regarding pension measures

[13]A structured and transparent mechanism for implementing gradual adjustments in retirement ages can be achieved by linking retirement ages to incremental changes in life expectancy, reducing financial imbalances, and avoiding the need for frequent policy changes (Arbatli Saxegaard and others 2016; OECD 2023).

Figure 2.13. Factors Shaping the Impact of Measure Announcements on Stakeholder Sentiment



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The panels depict the dynamic response of stakeholder sentiment (households, civil society organizations, unions, and opposition groups) to announcements of fuel price and pension age measures under different conditions, including 90 percent confidence bands (shaded bands and orange dashed lines). Impulse response functions are estimated using local projections with a smooth transition function (see Online Annex 2.4). The horizontal axis represents months since announcements ($t = 0$).

varies significantly when comparing pension age increases to other adjustments. Announcements of reforms to increase retirement ages generally lead to a sharp sentiment decline, while sentiments surrounding other pension measures, such as changes to contribution rates, are less negatively affected (Figure 2.13, panel 2a). This may be explained by the typically smaller magnitude of other measures and their technical nature (for example, changes in the indexation formula), which attract less public attention (Riekhoff 2021). Finally, it is important to note that these findings reflect average responses and indicate policy measures that governments can implement under normal economic circumstances. In the presence of significant macroeconomic imbalances, gradual reforms may be less feasible and other policy options can play a mediating role (see discussion later).

Macroeconomic conditions

Economic conditions at the time of announcement of a fuel price or pension age measure significantly shape stakeholder sentiment. Announcements made during periods of economic expansion show a marked reduction in negative sentiment (Figure 2.13, panels 1b and 2b). In contrast, reforms introduced during periods of weak growth result in sentiment twice as negative. This finding aligns with previous studies suggesting that voters attribute the current state of the economy to immediate government actions (Alesina and others 2024).

Structural characteristics

In advanced economies, the impact of fuel price changes on public sentiment is less negative and tends to improve over time. Conversely, in emerging markets and low-income countries, sentiment is more negative and deteriorates over time (Online Annex 2.4). This difference may be related to fuel price changes being less salient in advanced economies, where fuel expenditure is a smaller portion of household budgets, citizens are accustomed to price fluctuations from liberalized markets, and social protection systems are more robust.[14] Public sentiment regarding pension reforms is influenced by a country's population age structure. A higher old-age dependency ratio—the proportion of individuals age 65 and older to those ages 15–64 years—is associated with more negative sentiment toward pension age reforms (Online Annex 2.4). This is likely because a larger segment of the population is directly affected in older societies, intensifying opposition. Older age groups typically favor the status quo and oppose changes to retirement age (Bonoli and Häusermann 2009; Busemeyer, Goerres, and Weschle 2009).

Accompanying Measures and Inequality

Sentiment is driven by expected loss aversion (such as higher cost of living after fuel price hikes) and perceptions of fairness.[15] Low inequality (as indicated by a low Gini coefficient after taxes and transfers, as in *France* in 2011) is associated with muted negative sentiment following announcements of fuel price changes (Online Annex 2.4). Conversely, countries with high inequality have significant and persistent negative responses in sentiment. An increase in cash or in-kind transfers (of about 10 percent, such as in *Norway* in 2009) in the year preceding fuel price change mitigates the decline in sentiment (Figure 2.13, panel 1c). Similarly, for pension age measures, sentiment improves when there are substantial changes in government transfers before announcements (Figure 2.13, panel 2c).[16] Accompanying changes in retirement ages with expansions of pension coverage or improvements in the adequacy of benefits, as in the 2009 reform in *Australia* (Online Annex 2.5), can boost sentiment (Online Annex 2.4). These findings align with literature suggesting that low inequality and strong social protection systems help households absorb the impact of reforms and reduce resistance (Morrisson 1996).

Institutional Framework: Trust, Accountability, and Governance

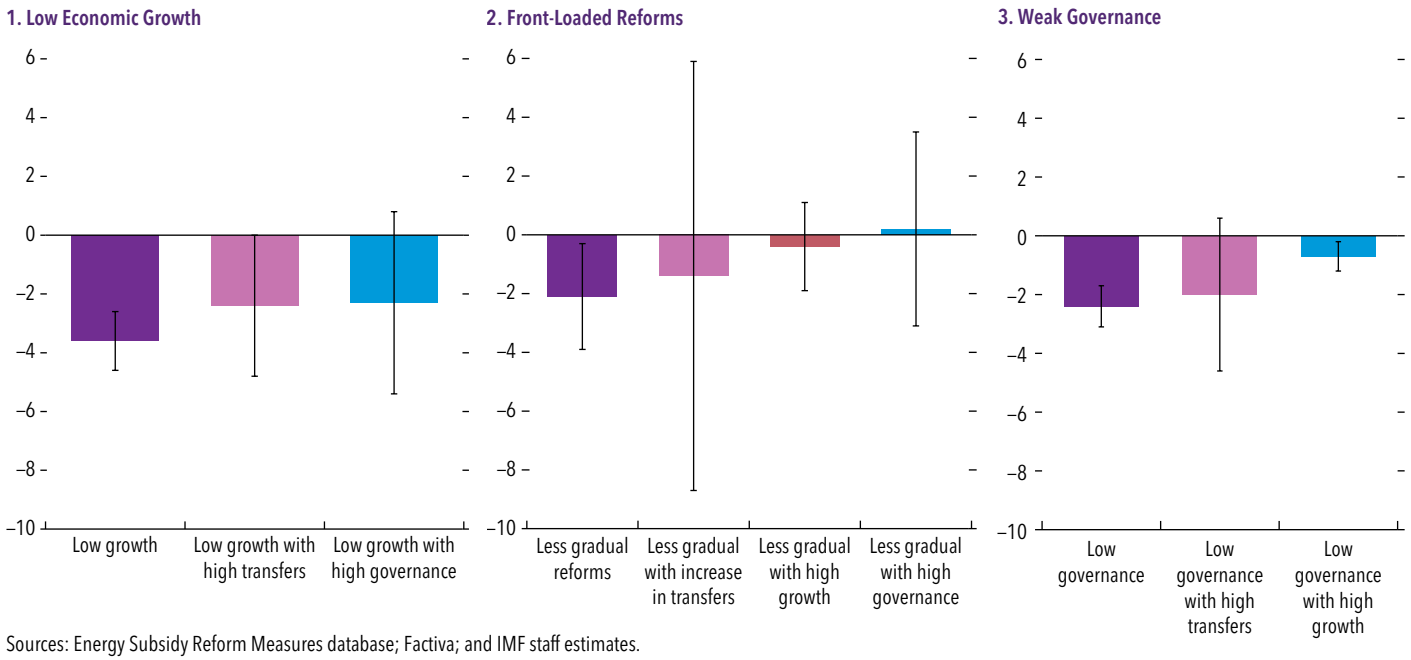
For fuel price increases, sentiment improves within two months of announcements, displaying immediate improvements in settings of high transparency, high trust, and stronger accountability (Figure 2.13, panel 1d). This finding is consistent with reduced public opposition when people trust the government to use budgetary savings effectively for the broader benefit of the population (Pritchett and de Weijer 2010; Strand 2013; Chapter 3 of the October 2024 *World Economic Outlook*). In contrast, resistance to reforms is notably higher in countries plagued by limited

[14]Besides the level of country income, the response of sentiment toward reforms does not vary significantly across regions or between oil exporters and importers (Online Annex 2.4).

[15]More broadly, perceptions of fairness are essential for reforms, as stakeholders' acceptance depends on both the expected direct impact of reform and the perceived impact on others (Chapter 3 of the October 2024 *World Economic Outlook*).

[16]The analysis covers cash and in-kind social benefits, including social security, social assistance, and employer-provided benefits.

Figure 2.14. Factors Mediating Stakeholder Sentiment in Response to Fuel Price Measure Announcements



Sources: Energy Subsidy Reform Measures database; Factiva; and IMF staff estimates.
Note: The panels depict the dynamic response of stakeholder sentiment (households, civil society organizations, unions, and opposition) to announcements of fuel price measures under different conditions, along with the associated 90 percent confidence error bars. Impulse response functions are estimated using local projections with triple interaction effects (Online Annex 2.4).

transparency, inefficiencies in public spending, and inadequate service delivery, where price subsidies often represent one of the few tangible benefits provided by the government (Online Annex 2.4).[17] In the case of pensions, countries with stronger fiscal councils and higher spending efficiency experience a faster recovery in sentiment after reform announcements (Figure 2.13, panel 2d; Online Annex 2.4). This finding also suggests that trust in public institutions, strong fiscal frameworks, and government spending efficiency can help support contentious pension reforms.

Overall, the results provide insight on first-best policies that governments can implement during normal times to advance reforms. Ultimately, the design of reforms (timing, graduality, and compensatory measures) depends on various aspects, including macroeconomic conditions, available fiscal space, and ability to identify and compensate specific groups affected by reforms. For example, governments may need to implement substantial, front-loaded adjustments as part of broader reforms to address macroeconomic imbalances. A critical question is how governments can enhance public sentiment in such circumstances. The analysis shows that even in challenging situations, governments can mitigate public opposition to their measures, as macroeconomic, institutional, and reform characteristics interact in important ways.[18]

- *Timing—low growth environment.* On average, sentiment regarding fuel price measures is generally more favorable during high-growth periods, yet governments may need to enact reforms during crises or when economic conditions are weak. In these instances, increasing government transfers can significantly improve negative sentiment. Furthermore, effective governance is crucial because it can reduce the negative sentiment linked to low growth conditions (Figure 2.14, panel 1).
- *Design—front-loaded reforms.* Strong governance plays a significant role in eliminating negative sentiment and facilitating front-loaded reforms. In addition, increasing cash or near-cash transfers can help reduce initial negative sentiment (Figure 2.14, panel 2). Studies have demonstrated that knowledge and understanding of reform objectives, benefits, and compensatory measures can significantly influence public support (Dabla-Norris and others 2023).

[17]Countries with less freedom have a marginally lower and not significant drop in sentiment following reform announcements.

[18]The analysis is based on triple interaction terms (Online Annex 2.4).

- *Institutional framework—weak governance.* In contexts of weak governance, public trust that the government will act in good faith to execute reforms or compensate losses in welfare tends to be low (Commander 2012; Calvo-Gonzalez, Cunha, and Trezzi 2015). In such environments, governments can mitigate negative sentiment through higher transfers (Figure 2.14, panel 3). The timing of reforms is also crucial; implementing measures during a period of strong economic growth can be particularly effective in reducing negative sentiment in low-governance contexts.

Lessons from Case Studies

The case studies for pension age reforms (*Australia*, *Germany*, and *Uruguay*) and fuel price reforms (*Colombia*, *France*, and *Morocco*) presented in Online Annex 2.5 provide detailed insights into the effective design and implementation of these measures, supporting the empirical analysis presented earlier.

The case studies demonstrate that although phased reforms generally garner public support, front-loading some adjustments can help build credibility for reforms. In *Morocco*, the government rapidly increased fuel prices to alleviate mounting fiscal pressures that would have imperiled their policy agenda. This approach helped build confidence in the continued implementation of a smooth liberalization of fuel prices from 2013 to 2015. The incremental approach that followed provides households and businesses with time to adjust, helping mitigate negative sentiment. Similarly, in *Colombia*, the incoming government in 2022 introduced a timeline for gasoline price adjustments over two years. Adhering to this schedule strengthened public trust and helped alleviate negative sentiment, although the government was not able to advance in the elimination of diesel subsidies. The phased approach in the pension reform in *Uruguay*, which gradually raised the retirement age, was crucial for gaining public acceptance.

Regarding the relevance of macroeconomic conditions, in *Germany*, the increase in the retirement age received support during a period of strong economic growth. Conversely, the experience of *Morocco* illustrates that reforms can still be implemented under challenging economic conditions by integrating them into a broader reform agenda that addresses the concerns of low- and middle-income households, emphasizing the trade-offs between sustaining subsidies and financing growth-enhancing public investments.

The case studies highlight the important role of stakeholder engagement and effective communication. The experience of *Uruguay* underscores the value of framing reforms strategically: the retirement age adjustment was presented as a means to sustain pension benefit levels, aligning with survey findings indicating strong public support for benefit adequacy. Country experiences also suggest that involving key stakeholders—such as the public, businesses, and civil society—in the reform process can enhance design and acceptance of the reforms through their valuable input. Both *Germany* and *Uruguay* illustrate the importance of bipartisan pension commissions in fostering trust and transparency, helping to secure political consensus before legislation is introduced. In *Morocco*, a comprehensive communication strategy was used to engage various stakeholders during the fuel subsidy reform. It involved using diverse platforms, including TV, radio, newspaper, and social media, with a particular focus on the needs of youth and middle-class families. This strategy effectively conveyed the message that subsidies were a poor instrument for social support, helping to alleviate concerns and garner support.

On the role of accompanying measures and reforms, the pension reform in *Germany* included a focus on initiatives to increase the employability of older individuals alongside increases in retirement ages. Similarly, the 2009 pension reform in *Australia* balanced the phased increase in the eligibility age for the Age Pension with a substantial boost to Age Pension benefits, particularly for low-income retirees. (Commonwealth of Australia 2009). In *Morocco*, although few direct measures were in place to support vulnerable households coping with the fuel subsidy reform, successful negotiations with the transportation sector helped contain the higher cost of living concerns, especially for poorer families. In *Colombia*, the government prioritized reforms to gasoline subsidies to protect the most vulnerable, delaying the removal of diesel subsidies until gasoline subsidies were fully phased out. The interaction of these reforms with other measures, such as simultaneous changes to spending or tax programs that could influence public support, is also important as seen in the case of *France*. Moreover, in *Uruguay*, the strategy of separating the retirement age reform from other pension modifications (such as increased contribution rates) helped reduce opposition to the measures.

Finally, the example of *Uruguay* demonstrates the critical role of *strong political ownership* for the successful legislation of reforms. The president prioritized pension age changes as a central pillar of government policy and actively engaged with key political stakeholders to foster consensus.

Summary and Policy Implications

Key reforms to major expenditure programs, such as energy subsidies in emerging markets and low-income countries and pension reforms in emerging markets and advanced economies, are essential for generating fiscal savings and promoting inclusive growth. Public resistance has historically hindered these reforms. Although both energy subsidy and pension measures have been frequent, substantial changes—such as major or sustained reductions in subsidies or raising retirement ages—are rare. This chapter, using a new measure of reform acceptability based on real-time stakeholder sentiment, reveals that positive public sentiment is a strong predictor of reforms and that enhancing support among households, CSOs, unions, and opposition groups is crucial for advancing energy subsidies and pension reforms.

Energy subsidy reforms seek to align prices with market values and enhance efficiency. While gradual phaseouts are often associated with more positive public sentiment, front-loaded approaches can gain support if paired with compensatory measures. It is essential to convey that fiscal savings will be reinvested in social and infrastructure needs, alongside considering broader structural reforms involving SOEs.

Pension reforms aim to ensure the long-term viability of retirement systems. As these systems are not automatically adjusted for aging, policymakers must periodically revise parameters to ensure their sustainability. Gradual reforms can help people understand and adapt to the changes, but rapid adjustments may be needed to address funding shortfalls in periods of economic stress. Securing public support requires guaranteeing adequate benefits for retirees, emphasizing the sustainability of pension systems for future generations, and addressing perceived inequities, such as curtailing special regimes.

Ultimately, the reform design (the intensity and pace of measures and the magnitude and cost of accompanying measures) depends on the macroeconomic context, the fiscal space, and the ability to compensate groups affected by reforms as detailed in Table 2.2. When macroeconomic conditions are favorable, phased reforms can alleviate public apprehension, as illustrated by the case of the retirement age increase in *Germany* or the reform of the fuel stabilization fund in *Peru* in 2010 (Clements and others 2013). This approach aligns with the principle of "fixing the roof while the sun is shining" (Lagarde 2017), addressing distortions during favorable times, alongside public consultations and mitigating measures (Clements and others 2013; Amaglobeli and others 2022; Chapter 3 of the October 2024 *World Economic Outlook*).

In challenging macroeconomic conditions, such as downturns or fiscal crises, large, front-loaded measures

Table 2.2. Reform Design Considerations under Different Conditions

	Pace and Intensity of Measures	Accompanying Measures	Communication and Ownership
Negative macroeconomic conditions	Prioritize front-loaded efforts that set a clear path of adjustment to tackle distortions and fiscal costs.	Compensatory measures are essential to address the needs of those most affected by broad macroeconomic shocks. It is important to articulate reforms within broader structural agendas.	The effect of measures in restoring macroeconomic stability and potentially as part of a wider reform agenda should be stressed.
High inequality	The pace of the reform might be less of a concern because fast actions to counter inequities might be well received.	Strengthening social safety nets is crucial for effectively delivering benefits to the most vulnerable as reforms progress. Policies should be implemented to enhance redistribution and governance.	Communications that illustrate the unfairness of the status quo and potential distributional impact of reforms should be prioritized, alongside compensatory measures.
Low trust	Credibly demonstrating commitment to reforms may require some front-loading of measures.	Early and visible investment in social programs and infrastructure should be prioritized. Steps should be taken to improve governance and reduce corruption while enhancing spending efficiency.	Communication must be handled with care–actions speak louder than words. Efforts should aim to show tangible results.

Source: IMF staff.

may be necessary to stabilize the economy and bolster support for reforms. The threat of a crisis can create an urgent need for action, enhancing the credibility and political acceptability of reforms (Alesina and Drazen 1991; Alesina and others 2024). For energy subsidy reforms, prioritizing immediate fiscal sustainability while minimizing adverse effects on vulnerable populations is essential. Front-loaded adjustments (such as the initial 20 percent increase in fuel prices in *Morocco*) can build credibility and pave the way for recovery (Stuchlik, Eatock, and Delivorias 2015). For pension reforms, ensuring the long-term financial viability of the systems is critical. However, during crises, rapid adjustments to parameters may be necessary, especially to address broader structural issues and build credibility, as in the two-year increase in retirement age legislated in *Greece* in 2012. For both energy and pension reforms, articulating initiatives within a broader structural agenda is also important, including governance reforms for state-owned enterprises in the energy sector (Coady, Parry, and Shang 2018) and labor market reforms for pensions (Börsch-Supan and Ludwig 2013).

A key component of successful reforms is planning alternatives that mitigate welfare losses and perceptions of unfairness. Political obstacles to reform often hinge on the size and organizing power of stakeholder groups benefiting from energy subsidies or pension benefits. Therefore, reform plans must consider who the current beneficiaries are and how proposed changes affect welfare across groups.

To build support for energy subsidy reforms, it is essential to strengthen social protection systems to address perceptions of inequities and mitigate the impact on affected households. For instance, cash transfers can serve as an effective tool to cushion the impact, as demonstrated in Brazil in 2001 (Clements and others 2013). Although targeted transfers are more cost-effective, they require greater administrative capacity and risk overlooking groups affected by reforms.[19] These alternatives might claw back some fiscal savings; by boosting the acceptance of reforms, they can ultimately help address market distortions, increase efficiency, and generate fiscal savings through output effects (Banerji and others 2017).

For pension reforms, allowing individuals close to retirement to keep their current benefits provides younger individuals with time to adjust to the changes. Increasing benefits for low-income retirees can also mitigate perceived unfairness, as in *Australia* where pension ages increased alongside increases in benefits for vulnerable older households (Commonwealth of Australia 2009). There can also be scope for enhancing redistribution policies through higher tax progressivity (Dabla-Norris and others 2015).

An effective strategy is to reinvest fiscal savings into initiatives that enhance welfare, such as scaling up social programs or funding critical public investments. For energy subsidy reforms, announcing reinvestment of fiscal savings into public services can bolster support. In environments with weak governance and low trust, it is essential to deploy compensatory measures—especially visible investments in social programs—early on. This approach addresses immediate concerns and shows that reform resources benefit the public. Increasing public spending efficiency can further bolster confidence that savings from energy subsidy reforms will serve the broader community (April 2017 *Fiscal Monitor*). Implementing policies to enhance governance and institutional quality is also crucial for building trust in the process (Strand 2013; Furceri and others 2019).

Strategic communication is vital for securing buy-in for reforms. Public messaging should emphasize the importance of these reforms, especially in contexts of limited transparency (Chapter 3 of the October 2024 *World Economic Outlook*). Communications should also highlight the role of these measures in restoring macroeconomic stability and position them as part of a broader reform agenda. Equity arguments may be less persuasive for groups at risk of losing benefits. The communication strategy should therefore include clear information about any planned compensatory measures to address the concerns of affected populations (Dabla-Norris and others 2023), as done during the fuel subsidy reform in *Morocco* in 2012. In low-trust environments, prioritizing transparency and accountability is essential to demonstrate how additional resources from reforms will be used, as emphasized in communications during the fuel subsidy reform in *Ghana* in 2005 (Clements and others 2013).

The communication strategy for pension reforms must focus on enhancing financial literacy, ensuring that individuals are informed and knowledgeable about pensions and how the pension system operates. Initiatives to clarify pension rules and provide

[19]The targeting mechanisms should reflect country-specific contexts (Grosh, Wai-Poi, and Tesliuc 2022). Digitalization also offers promise to enhance the effective and efficient delivery of support to the most vulnerable (Bird and Hanedar 2023).

individuals with regular statements of their expected retirement income can help increase reform acceptance (Bottazzi, Jappelli, and Padula 2006; Boeri and Tabellini 2010; Lusardi and Mitchell 2014; Fornero and Lo Prete 2019; Oggero and others 2023).

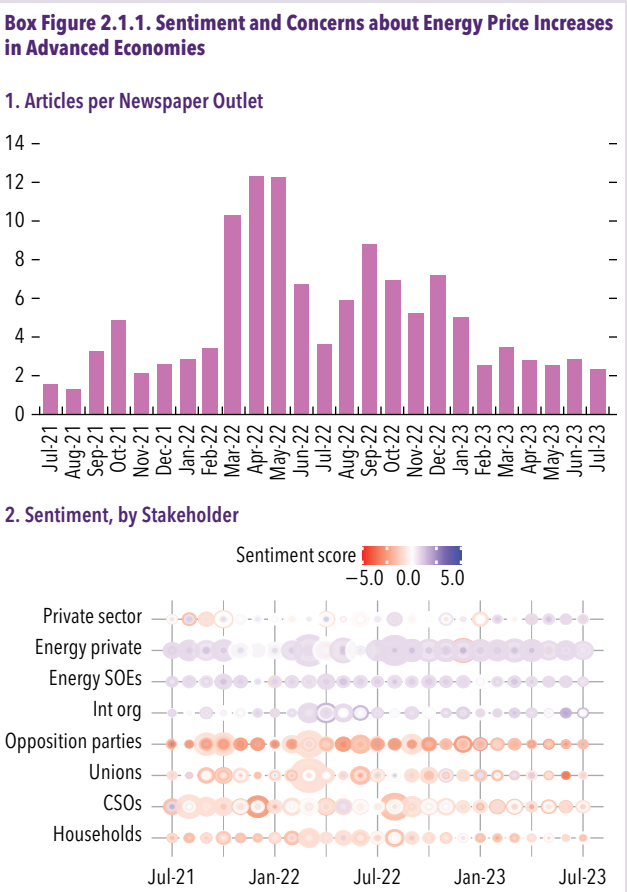
Finally, ownership and political commitment are key elements in building consensus and enhancing the credibility of the reform agenda (Branson and Hanna 2000; Banerji and others 2017). A technical approach that diagnoses issues and discusses options—such as the one used in *Uruguay* by its pension reform commission—can help foster a shared understanding among stakeholders, which is vital for advancing reforms. The evidence in the chapter shows that regularly published and institutionalized fiscal projections, such as projections by the Working Group on Ageing Populations and Sustainability of the European Commission, can facilitate necessary pension reforms. However, data and analytical skills within governments—especially in low-income countries—are often lacking. To address these challenges, capacity development efforts by the International Monetary Fund (IMF) and other organizations can provide essential support.

Box 2.1. Public Sentiment in Advanced Economies Regarding the 2022 Surge in Energy Prices

Following the onset of Russia's war in Ukraine, energy prices soared to record levels in early 2022—especially in Europe—because of rising natural gas prices. Because many advanced economies have liberalized fuel and utility markets, these international energy price hikes were passed to households and firms as higher fuel prices and utility tariffs. In response to the sharp increase in energy prices, many governments implemented measures to mitigate the impact, including limiting the pass-through of international prices to domestic prices by lowering consumption or excise taxes on retail energy products (Amaglobeli and others 2023). In addition, governments introduced cash and semi-cash transfers (vouchers, discounts) to further alleviate the burden of rising retail prices.

The 2022 energy shock illustrates the immediate impact of energy price fluctuations on public sentiment. From March to May 2022, the number of articles discussing energy prices more than tripled from their previous levels and remained elevated throughout 2023 (Figure 2.1.1, panel 1). Households, civil society organizations, unions, and opposition groups were particularly vocal right following the price surge, expressing negative sentiment. Even the private sector, typically neutral to positive in sentiment, voiced concerns about inflation, distributional issues, and the risks of energy shortages (Figure 2.1.1, panel 2). Rapid policy responses, particularly in Europe, where multiple measures were introduced by June 2022, helped mitigate the impact on households and contributed to a more muted sentiment in late 2022 and 2023.

Box Figure 2.1.1. Sentiment and Concerns about Energy Price Increases in Advanced Economies



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: In panel 2, the size of the bubbles reflects the frequency of sentiment, and red represents negative sentiment, while blue represents positive sentiment, with shading indicating intensity. CSOs = civil society organizations; Int org = international organizations; SOEs = state-owned enterprises.

The event highlights how public sentiment reacts to sharp fluctuations in fuel and utility prices, even in advanced economies accustomed to such changes. It also highlights the role of timely mitigation measures in shaping public sentiment. Many advanced economies resorted to placing limits on retail price increases, likely from the widespread impact of rising energy costs and broader political economy considerations (Amaglobeli and others 2022). Although these actions may have provided short-term relief, they were fiscally costly and could have been suboptimal given that it is essential to preserve price signals to encourage needed adjustment by households and firms, while effectively deploying assistance through existing social safety nets (IMF 2022).

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