



PORTUGAL

SELECTED ISSUES

September 2017

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Approved By
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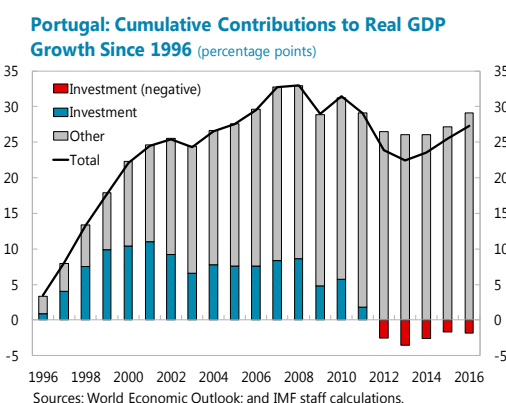
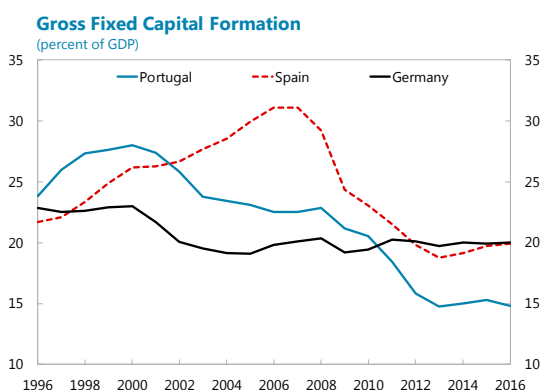
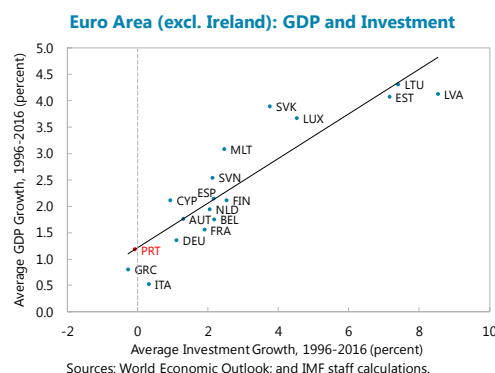
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INVESTMENT AND THE MEDIUM-TERM GROWTH OUTLOOK¹

1. Growth in Portugal has been moderate in the past two decades – the average growth rate of real GDP from 1996 to 2016 was 1.2 percent.

In particular, the low level of investment—compared with euro area peers—stands out as one of the key factors that contributed to these growth rates. The average growth rate of investment in the past 20 years was -0.3 percent, and investment as a share of GDP has been declining since 2000. Moreover, the cumulative contribution of investment to real GDP growth (from 1996 onward) turned negative in 2012.



2. This note derives the average investment growth needed for Portugal to achieve the 2-percent and 2.5-percent real GDP growth in the medium term (from 2017 to 2022).² To this end, a standard Cobb-Douglas production function³ is utilized:

$$Y_t = A_t K_t^{1-\alpha} H_t^\alpha, 0 < \alpha < 1$$

¹ Prepared by Yuanchen Cai and Dmitry Gershenson.

² During the 2012 Article IV Consultation, staff assessed Portugal’s medium-term growth potential and concluded that under a baseline scenario where “all the reforms planned under the program are fully implemented and bear fruit” and investment gradually recovers to around 20 percent of GDP by 2032, a two-percent real GDP growth in the long-term is attainable. See IMF (2013a) and IMF (2013b).

³ Estimating a production function necessarily implies a degree of imprecision, given the difficulty in measuring the inputs (returns to human capital, for instance). Still, when considered over a medium-term horizon, this exercise helps to better understand bottlenecks to growth and the policies needed to alleviate them.

where Y is output, A is total factor productivity (TFP), K is the stock of capital, H is the stock of labor augmented by the level of human capital, and α is the elasticity of output with respect to labor (which also represents the share of labor income in output).⁴

- Net capital stock is defined as capital stock in the previous year plus this year's investment, adjusting for depreciation and changes in capacity utilization. From 2017 to 2022, the depreciation rate is set to be constant and equal to the 2012-16 average, while the capacity utilization rate is assumed to increase steadily to reach the historical high of 84.6 percent by 2022.
- Human capital-augmented labor is the product of full-time employment and human capital per worker. Full-time employment from 2017 to 2022 is projected based on historical ratios of full-time equivalent employment to total employment, obtained from Banco de Portugal, and IMF staff medium-term projections of total employment.

Following Hall and Jones (1999), human capital per worker h is given by an exponential function

$$h = e^{f(s)}$$

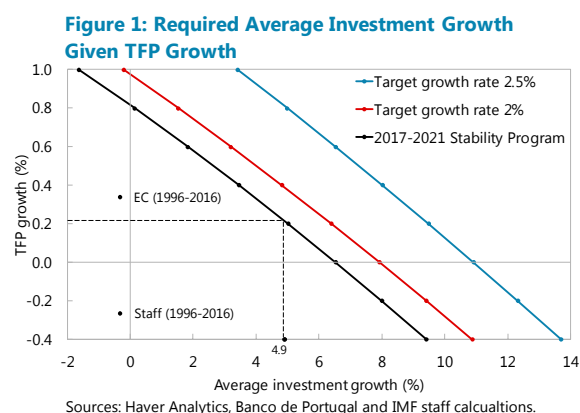
where $f(s)$ —a piecewise-linear function of average years of total schooling s —denotes total returns to schooling. Average years of total schooling for population aged 15 or above in Portugal are obtained from Barro and Lee (2013), which estimates several dimensions of educational attainment for 146 countries. The data on years of schooling are available quinquennially from 1950 to 2010 and are converted into the annual data by linear interpolation. Estimates of years of schooling for 2011 to 2022 are obtained from Barro and Lee (2015) and are similarly interpolated. The rate of return to one additional year of schooling is assumed to be 13.4 percent for the first four years of education, 10.1 percent for the next four years and 6.8 percent beyond the eighth year, consistent with the Mincerian rates of return to schooling⁵ in Psacharopoulos (1994).

- α is set equal to 0.57, the historical average of the labor income share in output over the past 20 years.
- The annual growth rate of total factor productivity from 2017 to 2022 is assumed to vary between -0.4 and 1 percent.

⁴ While more sophisticated econometric techniques have been employed in the literature to estimate potential output (and the natural rate of unemployment), point estimates from such studies suffer from a high degree of sensitivity to modest changes in specification and wide confidence intervals. See, for example, Dickens (2009) and Staiger, Stock and Watson (1997).

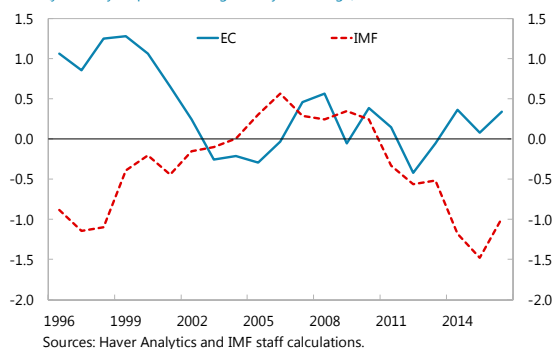
⁵ Mincer (1974) uses a semi-log OLS regression with years of schooling as an independent variable and the natural logarithm of earnings as the dependent variable. Therefore, the coefficient on years of schooling is the expected percent change in earnings to one additional year of schooling, which can be interpreted as the rate of return to schooling.

3. Figure 1 summarizes the results of the growth simulation. It shows the annual average estimates of growth rates of investment during 2017–22 that are needed to achieve the growth path envisaged in the 2017 Stability Program (1.8 percent in 2017, subsequently increasing by 0.1 percentage point each year to reach 2.2 percent in 2021)⁶, as well as the average GDP growth rates of 2 and 2.5 percent during that period under varying assumptions of annual TFP growth. Based on these estimates, if, for instance, the annual TFP growth is 0.4 percent, then investment must grow at about 8 percent per year to sustain the average GDP growth rate of 2.5 percent.⁷ The average annual growth rate of investment in the Stability Program is 4.9 percent, which implies that the TFP should grow at about 0.2 percent per year.



4. Staff estimates, however, show that the average TFP growth in the past two decades was only -0.26 percent. This result is in line with Amador and Coimbra (2007), who conclude that Portugal's economic growth during the pre-crisis boom could largely be attributed to factor accumulation rather than productivity growth. In contrast, the European Commission (EC) estimates that the annual TFP growth between 1996 and 2016 was 0.34 percent. That estimate, however, uses a reduced-form Cobb-Douglas production function. Such a function does not adjust the capital stock for changes in capacity utilization, nor does it adjust the labor for changes in human capital. Accordingly, EC's estimate of the TFP growth would naturally be higher compared with staff's (Figure 2).

Figure 2: Total Factor Productivity Growth
(year-on-year percent change; five-year average)



5. In conclusion, it is likely that the growth rate of investment must significantly exceed the projected 4.9 percent in order to achieve the GDP growth path envisaged in the 2017 Stability Program. Specifically, per staff estimates, investment needs to grow at around 8.5 percent per year in case the TFP growth remains at -0.26 percent. On the other hand, if the annual TFP

⁶ See Ministry of Finance (2017).

⁷ This result is dependent to some extent on the value of α and the estimates of rates of return to schooling. However, the impact does not materially change our conclusions. The EC estimates that α is 0.65. In that case, an even higher investment growth rate would be required to reach the desired GDP growth rate. For example, with $\alpha = 0.65$ and TFP growth of 0.4 percent, investment would have to grow at 8.8 percent to sustain the average GDP growth rate of 2.5 percent. Using the more recent estimates of rates of return to schooling in Patrinos and Montenegro (2014)—17.9 for primary education, 6.9 for secondary education and 17.9 for tertiary education—would only yield marginally different results in the forecast period. In the historical period, however, the implied TFP growth would be significantly lower.

growth could accelerate to 0.34 percent—the EC’s estimate—then a 4-percent growth rate of investment would suffice. This suggests that policies aimed at raising investment should be introduced in tandem with policies aimed at raising productivity. In addition to the ongoing efforts to foster human capital accumulation, other policies including increasing labor market flexibility, improving judicial sector efficiency, reducing corporate debt overhang, enhancing public sector payments discipline, and reducing energy costs should also be implemented.

References

Amador, J., and C. Coimbra. 2007. "Characteristics of the Portuguese Economic Growth: What Has Been Missing?" Working Paper 8/2007, Banco de Portugal. Lisbon.

Barro, R.J. & Lee, J.W. 2013, "A new data set of educational attainment in the world, 1950–2010", *Journal of Development Economics*, vol. 104, pp. 184-198.

Barro, R.J. & Lee, J. 2015, *Education matters: Global schooling gains from the 19th to the 21st century*, Oxford University Press.

Dickens, T. 2009, "A New Approach for Estimating Time Variation in the NAIRU" Ch. 4 in *The Labor Market and the Phillips Curve* (Brookings Institution)
<https://www.brookings.edu/research/a-new-approach-to-estimating-the-natural-rate-of-unemployment/>.

Hall, R.E. & Jones, C.I. 1999, "Why do some countries produce so much more output per worker than others?", *The quarterly journal of economics*, vol. 114, no. 1, pp. 83-116.

International Monetary Fund (IMF). 2013a. Country Report No. 13/18. Portugal: 2012 Article IV Consultation and Sixth Review Under the Extended Arrangement and Request for Waivers of Applicability of End-December Performance Criteria. Washington.

International Monetary Fund (IMF). 2013b. Country Report No. 13/19. Portugal: Selected Issues Paper. Washington.

Mincer, J., 1974. Schooling, Experience, and Earnings. *Human Behavior & Social Institutions* No. 2.

Ministry of Finance. 2017. Stability Program 2017-2021, viewed 12 June 2017,
<http://www.portugal.gov.pt/media/27640818/20170428-pestabilidade-2017.pdf>.

Patrinos, H. & Montenegro, C.E. 2014, "Comparable estimates of returns to schooling around the world", *Policy Research working paper*, vol. 7020.

Psacharopoulos, G. 1994, "Returns to investment in education: A global update", *World Development*, vol. 22, no. 9, pp. 1325-1343.

Staiger, D., Stock, J. and M. Watson 1997, "How Precise Are Estimates of the Natural Rate of Unemployment?", in NBER Conference Volume *Reducing Inflation: Motivation and Strategy* (Romer, C. and D. Romer (eds.)), <http://www.nber.org/chapters/c8885>.

CHALLENGES FOR PORTUGUESE BANKS¹

This note aims to take stock of recent developments in the Portuguese banking system that affect its capacity to overcome long-standing challenges of low profitability, poor asset quality, and weak capital adequacy. It highlights the positive influence of on-going regulatory initiatives and recent trends in the market environment. However, it also makes a case for speeding up efforts being undertaken toward: (i) boosting internal capital generation through more cost-effective business models; (ii) completing a comprehensive clean-up of the nonperforming loan (NPL) legacy; and (iii) strengthening capital through new equity issuance.

1. The challenges confronting Portuguese banks were discussed in the 2016 Article IV staff report, which highlighted low profitability and weak asset quality as key concerns.² The analysis pointed to three policy recommendations: (i) continuing cost-cutting, (ii) accelerating NPL disposal; and (iii) raising capital to cover losses from restructuring and write-offs. One year on, the context of such a discussion has evolved with respect to the regulatory environment and banks' financial and market indicators. While progress has been made along several fronts, critical weaknesses persist, suggesting there is room for fine-tuning the roadmap toward banks' long-term viability.

A. Recent Achievements

2. The regulatory environment has exerted positive pressure insofar as the review of business models has now become an integral part of the supervisory agenda, especially for Single Supervisory Mechanism (SSM)-supervised banks. Pursuant to the Capital Requirements Directive IV (CRD-IV), banks' business models are considered in the Supervisory Review and Evaluation Process (SREP) performed by the supervisory authorities not only to determine capital and liquidity requirements but also to assess banks' recovery plans.

3. A tightening of capital requirements has already begun with the SREPs conducted by the European authorities on the largest banks in recent years, and would continue with the imposition of a capital conservation buffer and additional systemic capital buffers by the Bank of Portugal. Nevertheless, against the background of stressed asset quality, Portugal still has one of the lowest common equity Tier 1 (CET1) ratios in the European Union (EU)—12.6 percent of risk-weighted assets as of end-March 2017.³ The macroprudential toolkit includes requirements for

¹ Prepared by Thierry Bayle and André Oliveira Santos.

² See Country Report no. 16/300.

³ For the six banks covered by EBA, CET1 was 12 percent at end-March 2017, i.e. the third-lowest ratio in the EU, whose average ratio was 14.1 percent.

all banks to implement a capital conservation buffer of up to 2.5 percentage points of CET1⁴ and for ‘Other Systemically Important Institutions’ (O-SII) to hold a capital reserve of up to one percentage point of CET1.⁵ In addition to these measures, higher capital has been required as a result of the SREP assessment aimed at reflecting the up-to-date supervisory view of each institution’s risks and of its business model. Given the challenges they are facing, Portuguese banks, as virtually all European banks, have thus been required to hold significant capital above the minimum regulatory level.

4. In light of these policy measures, the banking system has made significant progress on capital adequacy over the past few months. Caixa Geral de Depositos (CGD) completed a €0.5 billion subordinated debt issuance at end-March⁶, which has allowed the authorities to move forward with the €2.5 billion public capital injection. Both are part of a €5 billion recapitalization plan agreed with the EC. The authorities have also agreed to sell a 75 percent stake in Novo Banco to the U.S. private equity firm Lone Star, in exchange for a €1 billion capital injection. However, the sale is still subject to regulatory approvals and conditioned on a voluntary debt restructuring aimed to generate €0.5 billion CET1. Banco Comercial Português (BCP) has received a capital injection of €1.5 billion, while Banco Português de Investimento (BPI) has been taken over by Spain’s CaixaBank. Montepio has changed its legal status to a joint-stock company, which provides it with some flexibility to raise capital.

5. In conjunction with capital injections, banks have also vowed to streamline domestic and foreign operations while improving risk management. As a result, banks continue to deleverage and de-risk. Total assets fell 5.3 percent in 2016 while risk-weighted assets declined 7.6 percent. Banks’ strategic plans include continuing disposal of non-core assets, enhancing franchise value, restructuring international operations, reducing their branch networks, improving efficiency, and strengthening corporate governance and risk management. However, the strategic plans entail a large implementation risk given the need to deal with the legacy of the crisis, notwithstanding the improvement in the economic environment.

6. In part due to the above-mentioned inflow of new capital into the system, banks have increased loan loss impairments—showing a greater willingness to recognize losses—and have reduced operating costs, including by reducing staff and the number of branches. CGD booked about €2.4 billion in credit impairment net of reversals at end-2016. Overall, the coverage ratio of non-performing loans in the banking system increased from 40.6 percent in 2015 to

⁴ 1.25 percent from January 1, 2017, 1.875 percent from January 1, 2018, 2.5 percent from January 2019.

⁵ According to a phase-in, 50 percent of the bank-specific buffers will apply from January 1, 2018, and 100 percent from January 1, 2019.

⁶ A second tranche of convertible subordinated debt is scheduled in 18 months’ time for €0.43 billion.

45.5 percent in March 2017. Although this is around the EU average level⁷, it is still insufficient as impairments mostly cover overdue loans and only to a much lower extent unlikely-to-pay loans, and it does not allow NPLs to be marked sufficiently close to distressed debt investors' bid prices.

Although the branch network and staff were reduced by 7.2 percent and 5.5 percent respectively in the period June 2015-June 2016, cost-to-income remained stable at around 60 percent in 2016, and increased again in 2017Q1.⁸ This reflects a cost structure that has not seen the needed increase in its efficiency. Encouragingly, the government's recent extension to 2046 of the maturity of state loans to the country's bank resolution fund has alleviated a key structural drag on profitability. This is intended to allow the full repayment of these loans by Portuguese banks' ordinary annual contributions without the need to impose any extraordinary contribution.

7. Similar to the role played by the Internal Capital Adequacy Process (ICAAP) in strengthening banks' resilience, the Internal Liquidity Adequacy Assessment Process (ILAAP) is also required from banks. Consistent with its purpose, the ILAAPs ensure that banks, commensurate with their business models, can identify, measure, monitor, and manage all liquidity and funding risks. Therefore, under the aegis of supervisors and in tandem with deleveraging and de-risking as market signaling, Portuguese banks have initiated a restructuring of their funding structure, which has notably resulted in: (i) an increase of customer deposits (to 70.3 percent of total liabilities in March 2017 from 46.2 percent in December 2010) driven by non-financial corporations and households; (ii) a substantial decline in the issuance of debt securities and of wholesale funding since 2010; and (iii) a reduction in refinancing with central banks since the second half of 2012. As a result, the loan-to-deposit ratio declined slightly to 95.5 percent in 2016, well below the peak of 158.8 percent in 2010Q2. This evolution is welcome in the context of an eventual downsizing of the asset-backed securities and covered bond purchase programs, but raises new challenges for the building up sufficient loss-absorbing capacity in case of bank resolution.

8. In the context of the recovery and resolution planning cycle, banks are expected to adjust their capital and funding structure to the risks inherent in their business models. Pursuant to the Bank Recovery and Resolution Directive (BRRD), banks' recovery plans are required to ensure that the restoration of banks' financial conditions, following any significant deterioration, will not have a negative effect on financial markets, other institutions, or funding conditions. To this end, banks must identify the key steps to maintain the proper functioning of their core business lines and critical functions in a situation of financial stress, and thus may have to adjust their business models accordingly. Furthermore, the European Banking Authority (EBA) has stressed that the calibration of the Minimum Requirement for Own Funds and Eligible Facilities (MREL) target should be closely linked to the bank's resolution strategy and business models.

9. The market environment has also evolved materially, with interest rates likely to bottom out. Loan rates have been under pressure from the low-interest environment, but banks

⁷ For the six banks covered by EBA, the coverage ratio was 44.4 percent at end-March 2017, while the EU average ratio was 45.2 percent.

⁸ The system-wide cost-to-income ratio increased again to 65.9 percent as of end-March 2017, and even at a higher level for the six banks covered by EBA, for which it jumped to 70.1 percent, against a 63.8 percent EU average ratio.

have offset their effects on the net interest margin by offering low deposit rates. As the low-interest environment eventually comes to an end, the net interest margin is expected to improve. However, these higher rates could also adversely affect banks' asset quality given the faster repricing of variable-rate and short-term loans and their effect on borrowers' servicing capacity, even though the economic recovery could be expected to mitigate this risk.

B. Lingering Weaknesses

10. Asset quality in the Portuguese banking system remains low, with limited capital buffers exacerbating the weakness in the system. The authorities have estimated the outstanding stock of NPLs at 16.4 percent of total loans per EBA definition, i.e. accounting for both overdue and unlikely-to-pay loans, at end-March 2017.⁹ Meanwhile, credit at risk (the national definition of asset quality) slightly declined from 12.0 percent of gross loans at end-2015 to 11.8 percent at end-2016. This weakness in asset quality remains particularly concentrated in the corporate sector, with corporate NPLs at 29.0 percent at end-March 2017, compared with 6.7 percent on household loans for house purchase and 10.0 percent for consumer and other loans. The slight decline of the NPL ratio must be considered against the backdrop of deleveraging, so that the decline in the numerator is partially offset by the decrease in the denominator.¹⁰

11. Bank lending remains subdued, particularly to the corporate sector, contributing to weak investment and constraining the growth outlook. The low volume of new lending appears to reflect both banks' risk aversion toward overleveraged corporates and weak demand for credit from profitable corporates. While credit standards to households and firms have eased amid rising real estate prices, economic recovery and higher competition, credit outstanding to the private sector fell 3.8 percent in 2016. The decline was particularly pronounced for corporate credit, which declined 6 percent.¹¹ Empirical evidence indicates that growing companies have relied more on internal capital for investment than on bank loans¹² and that loans granted by non-residents, including intra-group loans, have increased. New lending remains concentrated primarily in consumer loans, with the outstanding stock rising by 4.3 percent since 2016Q1.

12. High impairment costs and subdued lending activity pose dual challenges to bank profitability. The significant rise in the flow of impairments, mainly due to those recognized by CGD in late 2016, combined with the stagnation of Net Interest Income (NII) and the fall in income from financial operations, has turned profitability indicators negative again, after a one-off positive return

⁹ The NPL ratio for the six banks covered by EBA stood at 18.5 percent at end-March 2017, against a 4.8 percent EU average ratio.

¹⁰ The NPL ratio decreased from 17.5 percent to 17.2 percent in 2016, resulting from the decrease of both the NPLs (numerator effect: -1.1 percentage point) and the total loans (denominator effect: +0.8 percentage point).

¹¹ Annual growth rates adjusted for derecognized securitization operations.

¹² Alexandre, F., L. Aguiar-Conraria, P. Bação, and M. Portel, 2017. *Poupança e Financiamento da Economia Portuguesa*, (Lisboa: Imprensa Nacional Casa da Moeda).

in 2015. While the reduction in the cost of deposits has been the driving force behind the recovery of NII over the last five years, this process is likely to slow or even reverse, as hinted by most recent indicators.¹³ In 2016, Portuguese banks posted the third-lowest return on assets (-0.6 percent) in the EU and the second-lowest return on equity (-7.4 percent).

C. Ensuring Long-Term Sustainability

13. The longer-term sustainability of banks' business models needs to be reviewed. The Portuguese banking system compares poorly to other banking systems on various cost proxies. Although the recurrent cost-to-income ratio, which only considers as income the sum of net interest income and fees and commissions, decreased from 72.5 percent to 65.2 percent during 2016, it remains high in view of the high cost of risk. Compared to Euro Area (EA) peers, the Portuguese banking sector has a dense branch network with: (i) 20 percent more branches (adjusted by population) than the EA average, and (ii) 55 percent more bank employees (in percent of bank assets) than the EA average. At the same time, the concentration in the sector is quite high, with the top five banks accounting for 76 percent of banks assets at end-2015, while the top five banks in other EA countries represented 28 percent on average.

14. Going forward, banks will need to accelerate the clean-up of their balance sheets. A comprehensive clean-up would break the vicious circle between weak banks with low profitability, high NPLs, and weak growth. This clean-up would not only include higher capital buffers, provisions, and impairments; it would also include expedited processes to recover or restructure loans to viable borrowers, and write-off or sell the others. Supervisors need to ensure that banks set up predictable, time-bound and credible plans¹⁴ to work out non-performing legacy assets and incentivize them to move NPLs off their balance sheets by requiring them to increase their coverage ratios, especially by setting aside appropriate provisions for unlikely-to-pay loans. In this respect, the European Central Bank (ECB) and Banco de Portugal (BdP) should continue to apply their ability to require institutions to apply a specific provisioning policy (which affects the 'Profit and Loss' accounts) or treatment of assets in terms of own funds requirements (which only impacts the Pillar 2 requirement).

15. Beyond this clean-up of balance sheets, banks will also have to absorb the impact of the phasing-in of the definition of own funds requirements in the Capital Requirements Regulation (CRR). The difference, for the six banks covered by EBA, between their current CET1 ratios (12 percent at end-March 2017) and their fully loaded CET1 ratios (11 percent) illustrates the magnitude of the impact of CRR transitional arrangements, to be covered by end 2018, and which needs to be incorporated in banks' capital planning. This impact (1 percent of risk-weighted assets) is higher than the one to be overcome by the other EU banks (0.3 percent of their risk-weighted assets). To some extent, the implementation of the revised standards in market risk and

¹³ In 2016 Q4, the cost of new deposits decreased 3 basis points in the household segment and rose 2 basis points in the non-financial corporation segment.

¹⁴ Pursuant to the Guidance to banks on NPLs adopted by ECB in March 2017, significant institutions have submitted their plans, which are still in the process of being reviewed by a dedicated taskforce recently set up at the ECB. Guidance for the less significant institutions will be developed in the coming months.

counterparty credit risk could also influence banks' business models due to the introduction of more risk-sensitive capital requirements for some transactions.

16. These challenges will be exacerbated by the forthcoming implementation of the MREL policy. These requirements will be decided for each individual bank by the resolution authorities (i.e. the Single Resolution Mechanism (SRM) for the SSM-supervised banks or BdP for the others) over 2017, with appropriate transitional periods not yet defined. However, Portuguese banks will face significant challenges in issuing MREL-eligible instruments, both because of their low profitability and the likely need of a legislative revision to allow for the contractual subordination clauses (from the clauses indicated on a bond's term sheet).¹⁵ Therefore, the demands are high on them to boost internal capital, clean-up balance-sheets, and ensure sustainable profitability to be able to attract investors through such instruments. In addition, those banks—especially the small and medium-sized ones—that are predominantly funded by deposits will be hindered by their limited capacity to tap such markets, and may expect to incur spreads higher than those of their larger competitors, thus increasing the cost of funding to levels close to that of new equity issuance.

17. The impact of these clean-up efforts will be amplified by the move from the current 'incurred-loss' model to the 'expected credit-loss' model, in relation with the implementation of new IFRS9 provisioning rules, from January 2018.¹⁶ Because IFRS9 rules require banks to set aside provisions based on expected losses instead of incurred losses, the shift will necessarily result in an initial increase of banks' stocks of provisions, triggering a reduction in their capital bases. However, the impact of this change will depend not only on the level of existing provisions under IAS39 and current capital, but also on the method used for calculating regulatory capital (standardized approach—STA— or internal models-based approach—IRB). Therefore, the impact will differ for banks using STA and the few ones using IRB, the latter being already required to deduct any shortfall of loan loss provisions over regulatory expected losses from their CET1 ratios.¹⁷

18. Banks will also need to sharpen and redesign their business models with an eye on internal capital generation and preservation. Even though banks' NII would gradually expand assuming a higher interest rates' environment, and since they already derive a relatively high proportion of their total operating income from net fees and commissions (31.1 percent for the six banks covered by EBA at end-2016, compared to 27.2 percent in the EU), cost-cutting is needed to achieve higher profitability. This would likely require further cutting the extensive branch network and staffing costs. On the revenues' side, banks would need to develop the range of their digital banking products and services, and diversify their exposures—in particular, by shifting their

¹⁵ A European legislative proposal on subordination is under discussion.

¹⁶ Unless transitional arrangements are adopted by the EU to phase in the capital impact of the new rules over five years, as currently proposed by the EU Council.

¹⁷ For these IRB banks, the IFRS9 impact will be determined by the difference between the amount they will need to recognize under the new IFRS9 rules and the amount they have already deducted as a shortfall in accounting provisions over regulatory expected loss (EL). Conversely, any excess in accounting provisions (under the new IFRS9 rules) over regulatory EL will be allowed to be recognized in these banks' Tier 2, until a certain limit.

attention from nontradable to tradable sectors—to better manage risks and finance new engines of growth.

19. Even though the banking system’s exposure to the Portuguese public sector is relatively small, the sovereign-bank nexus is still a concern in Portugal. The banking sector’s exposure to Portuguese sovereign bonds represents about 8.3 percent of total assets. Among the related downside risks, increases in yields arising from weaker public sector finances, adverse debt dynamics or ratings actions, would lower the value of banks’ holdings of sovereign debt and weaken their capital position. State ownership of a bank is, of course, a direct additional channel for sovereign-bank linkages.

20. The clean-up of balance sheets and the consolidation in the banking system should be supported by a change in corporate governance. A governance structure with a focus on depositor and shareholder interests will make sustainability of banks’ business models the primary objective. The process of selection and appointment of Board members and management needs to be carefully monitored to ensure that, in addition to meeting fit and proper requirements, appointees are incentivized to focus on long-term profitability and are accountable for the results. In addition, the role of the risk management and audit committees could be further strengthened to minimize risk exposure and ensure Board members’ risk-awareness and accountability. Both supervisory authorities and shareholders are encouraged to identify and address corporate governance problems early on, before losses build up to excessive levels.

21. The predictability that such a comprehensive strategy across the banking system would engender is necessary to attract new private capital to support the clean-up of balance sheets over the long term. The high level of public debt leaves no fiscal space to allow public financing for a ‘bad bank’, and the regulatory environment, with EU State aid rules and the BRRD, puts key constraints on precautionary recapitalization, thus making it essential that banks raise additional private capital. A comprehensive approach¹⁸ including fundamental changes in the internal governance structure of banks would remove the uncertainty surrounding the treatment of legacy nonperforming assets and the criteria used for future lending, allowing potential investors to realistically assess the expected return on their capital. It is doubtful that sufficient private investment would be forthcoming without a credible and ambitious effort by banks, given the difficulty in assessing the value of assets and enforcing creditor claims over a predictable timeframe.

D. Conclusion

22. Although progress has been made on capital adequacy and funding structure, key weaknesses related to asset quality and profitability need to be urgently addressed given the more stringent forthcoming regulatory requirements (full loading of Basel III, MREL, IFRS9). Therefore, there is a need to speed up the efforts already undertaken, with a view to: (i) boosting

¹⁸ As is increasingly promoted in the wake of the publication of the “SSM supervisory statement on governance and risk appetite” (ECB, June 2016).

internal capital generation; and (ii) removing the impediments to NPL resolution; in order (iii) to allow the banking system to meet forthcoming regulatory requirements.

23. Internal capital generation could be achieved both through cost-cutting and higher earnings. Cost cutting has already started, but can gain momentum through further downsizing in the domestic and foreign networks, divestment of non-core assets and business lines, and reducing overheads, in order to lower the break-even point. The likelihood of interest rates bottoming out would not release the pressure on Portuguese banks in this respect. Banks will need to diversify their income toward fee-generating financial products and services to improve long-term earnings. This might include an increased focus on digital banking.

24. NPL resolution is a top priority for authorities and banks alike. It is urgently incumbent to continue to make progress on removing the barriers to NPL workouts, as recently confirmed by the ECB¹⁹ and the EU Council.²⁰ This would primarily entail measures aimed at: (i) improving the legal framework—facilitating the judicial and extra-judicial insolvency and recovery processes, and collateral enforcement²¹; (ii) removing tax disincentives to impairment and write-offs; and (iii) developing the NPL market. On the banks' side, implementation of ECB guidance is recommended, especially in the context of the NPL reduction plans currently being reviewed by the ECB and BdP for significant institutions and less significant ones, respectively.²² In addition to streamlining internal workout strategies, the recent increase in the provisioning coverage of NPLs needs to be furthered and viewed as an incentive for banks to develop their NPL sales to third parties. The alternative of a market-wide solution—in the form of an Asset Management Company—could even be worth exploring, however with due consideration of the key constraints related to the BRRD and State-aid rules.

25. Alongside their efforts to meet the prerequisites on profitability and asset quality, Portuguese banks need to place emphasis on addressing forthcoming regulatory challenges. The most urgent challenge will be to absorb the impact of IFRS9 rules. Subsequently, the implementation of fully loaded Basel III will likely require new equity issuances, while the setting of MREL targets will also lead Portuguese banks—predominantly deposit-funded—to tap debt and capital markets.

¹⁹ See “Stocktake of national supervisory practices and legal frameworks related to NPLs” (ECB, June 2017).

²⁰ See the recently approved EU Council guidance (May 2017).

²¹ These efforts would be consistent with the European-wide initiatives for a directive on corporate restructuring.

²² See “Guidance to banks on non-performing loans” (ECB, March 2017).

References

Alexandre, F., L. Aguiar-Conraria, P. Bação, and M. Portela, 2017, *Poupança e Financiamento da Economia Portuguesa*. (Lisbon: Imprensa Nacional Casa da Moeda).

European Central Bank, June 2016, "SSM supervisory statement on governance and risk appetite" (Frankfurt am Main: European Central Bank).

European Central Bank, March 2017, "Guidance to banks on non-performing loans" (Frankfurt am Main: European Central Bank).

European Central Bank, June 2017, "Stocktake of national supervisory practices and legal frameworks related to NPLs" (Frankfurt am Main: European Central Bank).

International Monetary Fund (IMF), 2016. Country Report No. 16/300. Portugal: Staff Report for the 2016 Article IV Consultation and Fourth Post-Program Monitoring Discussions. (Washington, DC: International Monetary Fund).

THE PUBLIC SECTOR WAGE BILL IN PORTUGAL¹

Portugal achieved an impressive consolidation of its public wage bill during the adjustment program, with large efficiency gains and savings generated in the education and health sectors. As in many European countries, these efforts relied on blunt but quick measures such as across-the-board attrition and temporary wage cuts, which could not be sustained over the medium-term. From 2015, these measures were reversed or unwound, and structural reforms lost momentum. Going forward, Portugal projects a large reduction in the wage bill from 2017–2021 (-1.3 percentage points of GDP) that needs to be supported by specific reforms. This will prove challenging, as wage and public employment policies show evidence of procyclicality. To prevent adverse impact on public service provision, targeted reduction in public employment will require adjusting employment levels across sectors. Finally, containing public compensation will require structural wage measures to gradually address large public wage premium relative to the private sector.

A. Trends

- 1. The Portuguese public wage bill was among the highest as a share of GDP in the European Union (EU) before the financial crisis.** Over 1995–2005, the wage bill increased from 12½ to 14½ percent of GDP, the second highest in the EU. Government employment expanded in Portugal during that period (from 9½ to 11 percent of the working-age population), and improved significantly in terms of qualifications—an increase of 63 percent of staff with a bachelor’s degree or higher. During 2005–2008, Portugal succeeded in reducing its wage bill by 1½ percentage points of GDP, before it rose sharply in 2009 in the context of a severe recession and an increase of 2.9 percent across the wage schedule.
- 2. The fiscal situation following the financial crisis required a strong fiscal consolidation effort, including a sizeable wage adjustment.** The fiscal path was anchored on the stabilization of debt through an improvement in the primary balance. As part of this adjustment, reforms to the government wage bill were needed, reflecting its large share in the budget and its high level relative to peers.
- 3. To adjust the wage bill, priority was given to reducing government employment and reducing pay in the short term.** *To reduce employment*, the adjustment relied on across-the-board attrition (corresponding to an entry-to-exit ratio of 1:3), as well as a cut in the number of workers on temporary contracts. For local administrations, special provisions were introduced to reduce transfers in case of missed targets for employment reduction. General government employment declined from 14 to 11 percent of the working-age population—from 750,000 to about 660,000 workers in 2010–2014. All levels of government contributed to these efforts, including subnational governments, with the largest share in education (35 percent of total reduction in employment), and defense (9 percent). *To contain wages*, successive temporary cuts were introduced, with greater

¹ Prepared by Maximilien Queyranne. The author would like to thank the authorities for their comments.

reductions for higher-salaried employees. These included wage cuts between 3.5 to 10 percent in 2011 for wages above €1500, the suspension of the 13th and 14th monthly salaries in 2012, and additional 2.5 to 12 percent cuts for wages exceeding €600 in 2014. In addition, salaries have been frozen since 2009 and promotions, performance bonuses, and mobility-related salary changes from 2010.

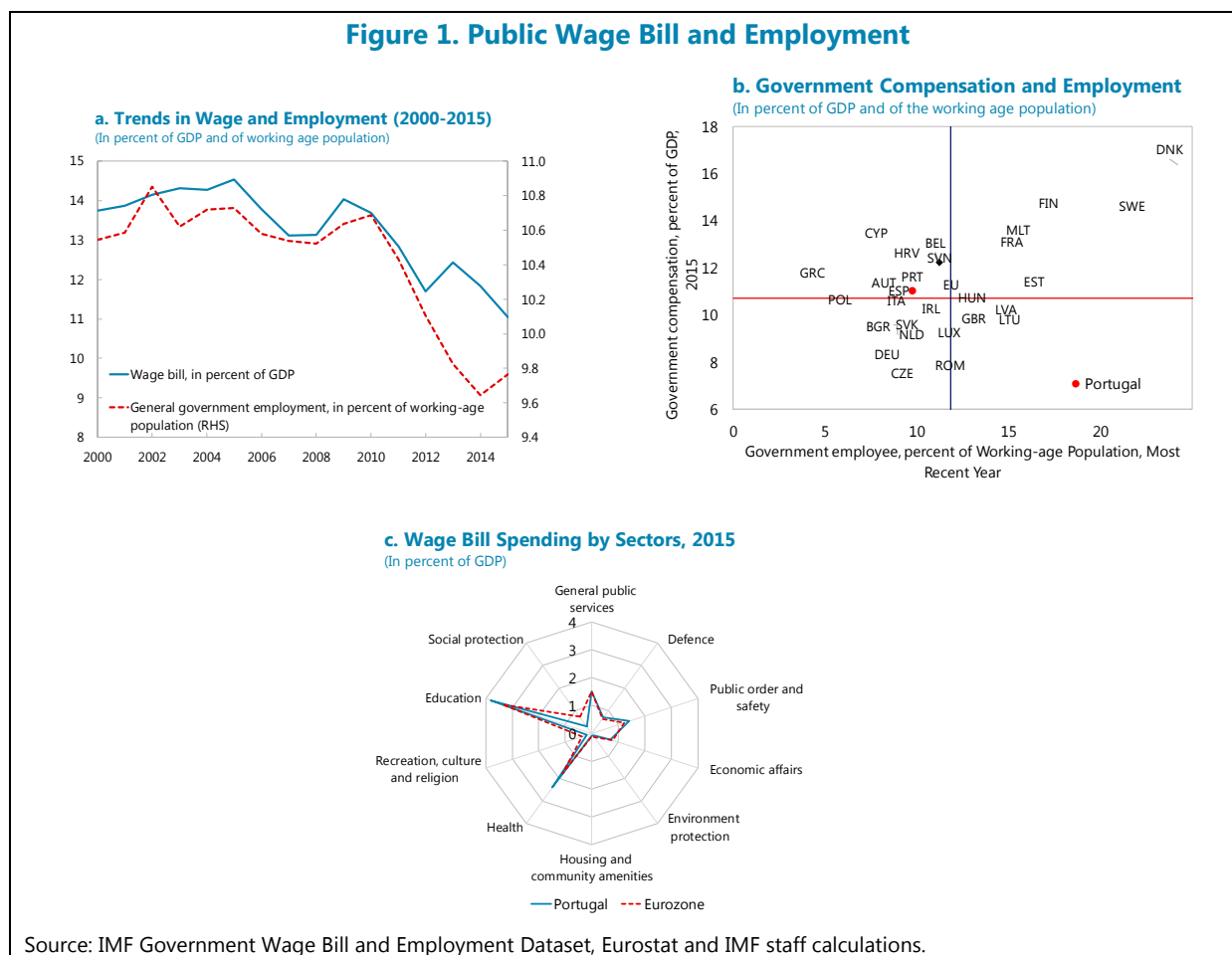
4. The government also made structural changes to improve oversight, address inefficiencies, and increase flexibility in the management of human resources. One important step was the development of a comprehensive government employment and remuneration database (*Information System on the Organization of the State*) in 2011.² This improved oversight and transparency and became an important tool in identifying inefficiencies and potential areas for reforms. To enhance flexibility and address overstaffing issues and understaffing needs, a *special mobility pool* was created in 2007 and then expanded for people who became redundant as a result of reorganizations within the public administration. Several career-specific programs for separation through severance packages by *mutual agreement* were launched for less qualified workers, teachers, and senior experts in areas with overemployment. However, attrition was the main driver of employment rationalization, and the mobility pool and the termination scheme resulted in fewer departures than expected. Furthermore, to ensure service delivery while attrition measures were being taken (and to reduce overtime payments), the standard government workweek was increased from 35 to 40 hours. To organize the government's pay system, a new wage grid was adopted in 2014 that integrated all careers in a *Single Wage Scale* and replaced the existing arrangement of over 115 base wage levels and exceptions. A *Single Supplements Scale* was also adopted to significantly reduce the number of supplements. Finally, to better align the government compensation package with the private sector, the contribution rate to the civil servants' health care scheme was raised.

5. These reforms have been largely effective in containing the wage bill, with the education and health sectors contributing the most (Figure 1). In 2010–2015, the wage bill was reduced by 2.4 percentage points of GDP, and contributed to more than two-thirds of total expenditure consolidation (-3.5 percentage points of GDP).³ As a result, the wage bill appears within the range of other European countries and slightly above the euro area average as a percent of GDP (Figure 1b). Health and education, which employ the largest number of public employees, contributed 25 and 45 percent, respectively, of the total wage bill consolidation. However, wage spending in these sectors remains higher than the euro area average, by about 0.4 percent of GDP in education and 0.6 percent of GDP in health (Figure 1c).

² The comprehensive database allows monitoring of the evolution of the stock and flows of public sector employees by different activities, professional categories, types of contract, and remuneration.

³ A change in the statistical treatment of central government transfer to the civil service pension scheme to balance its accounts contributed to increasing compensation spending.

Figure 1. Public Wage Bill and Employment



6. In the education sector, efficiency improved during the adjustment program. The student-teacher ratio increased significantly in both primary and secondary education, while it declined in tertiary education (Figure 2). The average size class also rose from 2010-2014, both in primary (from 20.1 to 22.1 pupils per class) and secondary education (from 21.2 to 22.7), and is now above the EU average. But average annual teaching hours have declined in primary education, possibly driven by ageing teachers who have reduced teaching hour obligations (but higher non-teaching hours),⁴ and remain relatively low in secondary education (Figure 3). Overall, Portugal appears better positioned in primary education compared to other European countries, but significant efficiency gains have been achieved in the secondary education as well, with lower spending per student associated with higher PISA score (Figure 4).

⁴ From 2010-2014, the share of teachers over the age of 50 has increased from 28.0 to 35.2 percent in primary schools and from 22.5 to 33.1 percent in secondary schools.

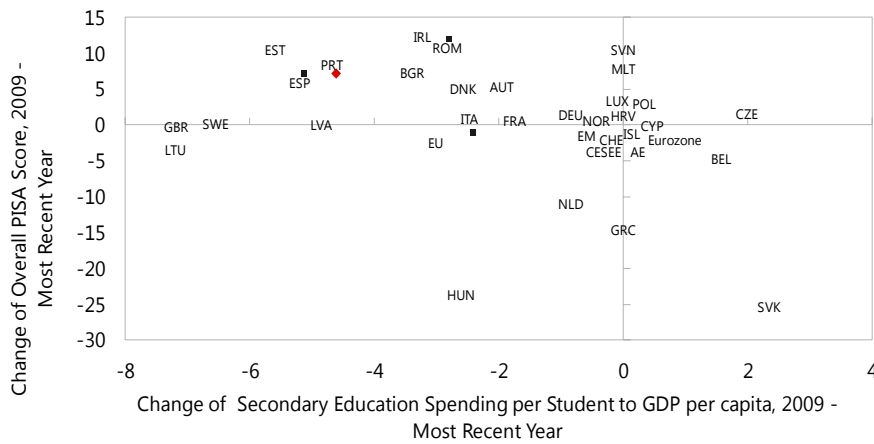
Figure 2. Student-Teacher Ratios



Figure 3. Teaching Hours in Education



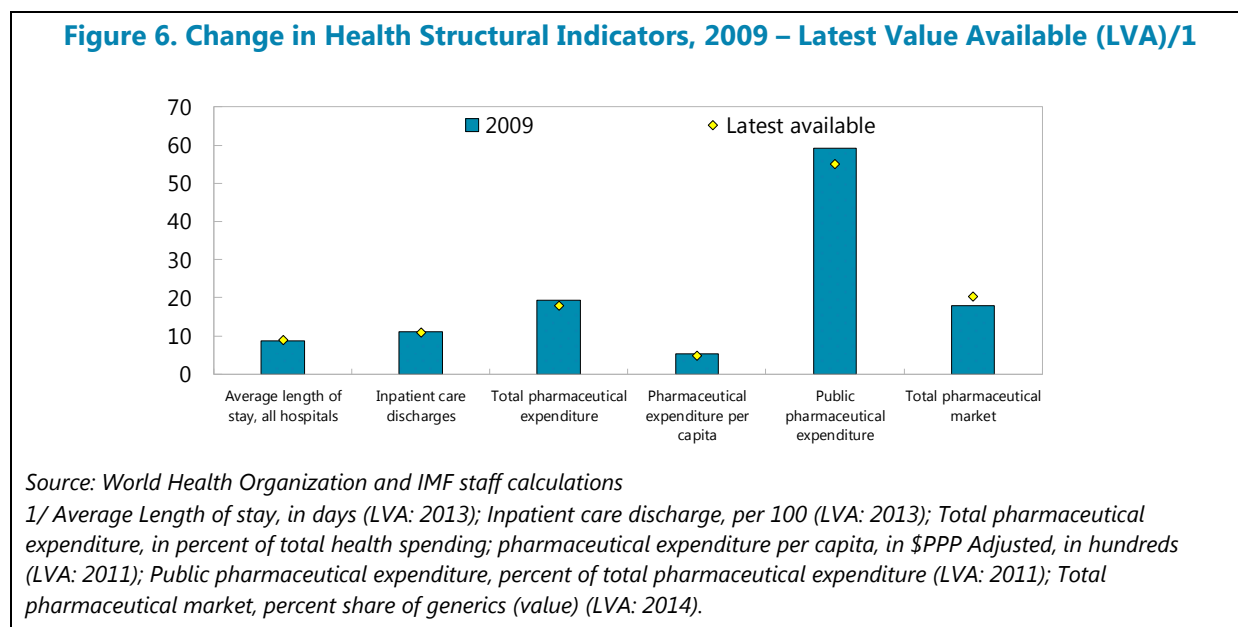
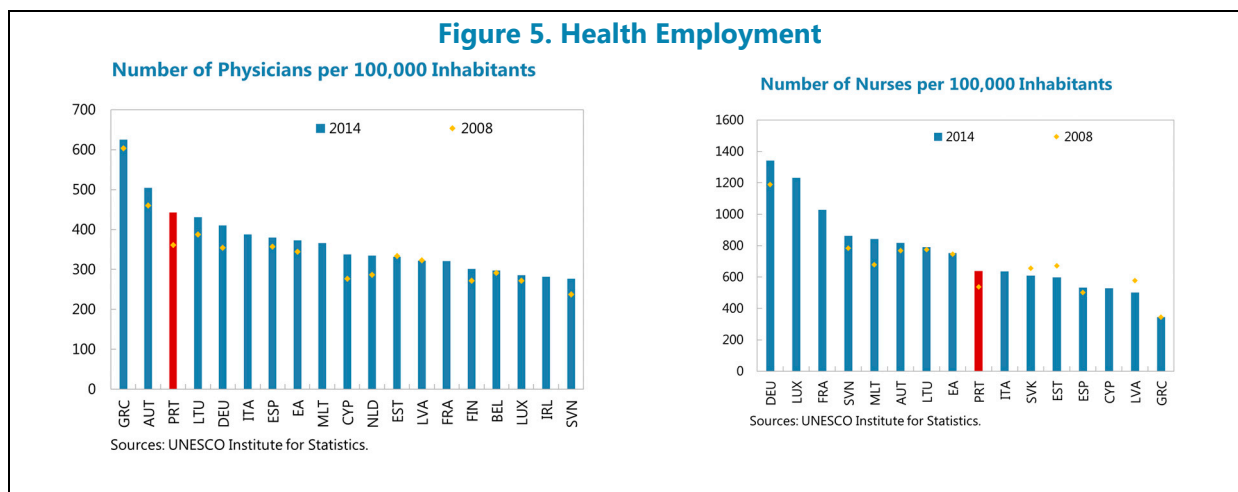
Figure 4. Change in PISA Score and Change in Education Spending (2009-Most Recent)¹



Source: World Bank and IMF staff calculations.

¹/ Excluding Finland.

7. In the health sector, various indicators point to further room for efficiency gains (Figure 5). Benchmarking public employment in the health sector is difficult, reflecting differences in accounting for spending on wages of primary doctors and nurses across countries. Overall, Portugal appears to have a higher ratio of doctors relative to the euro area average and most comparators, with a sharper increase since 2008. Progress was achieved during the adjustment program in shifting doctors from hospital services to primary care, an effective way in reducing costs. Between 2010 and 2014, the share of doctors working in hospitals declined in Portugal (from 55.7 to 49.8), while it increased in the euro area (from 47.9 to 54.9). However, the production mix in the health sector may indicate remaining inefficiencies. The number of nurses has converged to the euro area average but remains comparatively low. As a result, the ratio of nurses per physician is significantly below the euro area average (1.5 and 2.3, respectively), leading to a costlier input mix. Structural health indicators mostly point to higher efficiency in public hospitals and in pharmaceutical spending (Figure 6)



8. Since 2014, efforts to rationalize public compensation and employment have made little progress. In 2016, the government gradually reversed the remaining wage cuts (80 percent) adopted under the adjustment program (at a total cost of 0.3 percent of GDP),⁵ and returned to the 35-hour week for a large share of the civil service. Some structural reforms have also been halted and are unlikely to generate expected savings. The single wage scale was initially projected to save about 0.4 percent of GDP by streamlining career paths. Savings (of about 0.1 percent of GDP) were also expected from the adoption of the Single Supplements Scale through a reduction in the number of supplements. However, the rolling out of these reforms has been postponed and will not generate savings over the short and medium terms. Employment rationalization has fallen short of the planned attrition (expected entry-to-exit ratio of 1:2), with an increase of public employment of about 1.2 percent from end-2014 to end-2016. As a result, the wage bill has plateaued at 11.3 percent of GDP since 2015, and is above the 2016 target set in the 2016-2020 Stability Program.

B. Challenges

9. Portugal has set an ambitious consolidation path for the public wage bill over the next four years, which needs to be supported by specific reforms. In the 2017-2021 Stability Program, the wage bill is expected to decline from 11.3 percent of GDP in 2016 to 10.0 percent of GDP by 2021. Even with more optimistic GDP growth assumptions, achieving an average annual reduction of about 0.3 percent of GDP will require continuous expenditure savings which are not yet specified. First, the objective of reducing public employment through attrition appears less ambitious, as it only implies an entry-to-exit ratio of less than one, compared with a ratio of 1:3 during the adjustment program, and 1:2 since then. Second, wage policies will be geared toward gradually unfreezing career progression to reinforce staff motivation, with an expected fiscal impact of +0.3 percent of GDP over 2017-2021. Finally, ensuring that public wages will not benefit from any increase in the next four years might prove difficult in a context where private wages have started to increase on the back of a cyclical upswing.

10. Wage and public employment policies show evidence of procyclicality. The wage bill experienced a larger decrease from 2011-2015 (-3.5 percent on average) than overall government spending (-1.3 percent), followed by a sharp increase in the current cyclical upturn (+2.8 percent in 2016) while total government spending continued to decline (-3.9 percent). Wage bill spending tends therefore to exacerbate output fluctuations and weaken the stabilizing role of fiscal policy.

11. Fiscal planning has suffered from numerous adjustments in government compensation and employment policies. The government implemented a large array of short-term wage bill consolidation measures that were then reversed, leading to difficulties in effectively integrating the wage bill into budget planning. Thus, the wage bill was over executed in 2015-2016 (respectively +1.5 and +1.2 percent), as estimating the fiscal impact of wage policy reversal proved difficult. The

⁵ The second wave of wage cuts adopted during the IMF supported program were cancelled (with no retroactive effect) by the Constitutional Court in end-2014. One fifth of these cuts were reversed in 2015.

gradual unfreezing of career progression announced in the 2017-2021 may further exacerbate challenges in forecasting the wage bill.

12. Portugal succeeded in reducing public employment, but further across-the-board attrition may have an adverse impact on service provision in some sectors. Increasing the rate of natural attrition would provide a gradual approach to rationalizing public employment, and would generate savings in both the short and medium terms. While a similar level of attrition across sectors would be easier to implement, it may have an adverse impact on service provision in some sectors where staffing has already declined significantly.

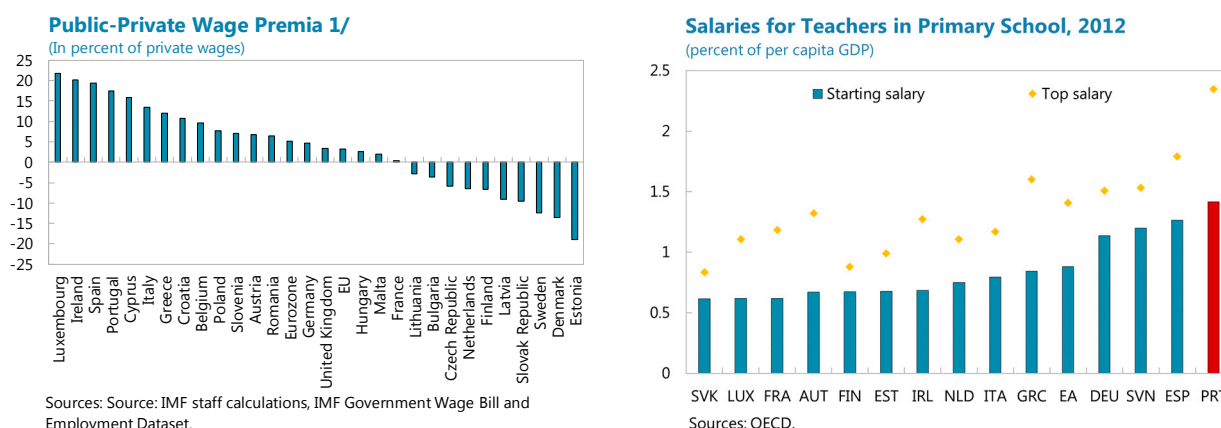
13. In the medium to long term, the main challenge for Portugal is to adjust employment levels across sectors to demographic changes. Ageing will lead to higher needs in the health and long-term care sectors, while the number of school-aged children will sharply fall in Portugal (-20.8 percent from 2013-2030 projected in the 2015 Ageing Report, with 26.5 percent in primary education). Adjusting service delivery in these areas will require careful workforce planning to ensure the alignment of public employment levels with Portugal's needs.

14. Public sector employees in Portugal appear to benefit from a larger wage premium than in most European countries. On average in the EU, public wages are higher than private wages, even when controlling for skill differentials. However, Portugal has one of the highest public-private wage premiums in the EU (Figure 7), even though the data has significant lags as it refers to pre-crisis level.⁶ More recent analysis point to a large albeit slightly declining public wage premium in 2012 in Portugal (Perez and al., 2016), which remains above most EU countries (Campos and al., 2015). In addition, the public wage premium still benefits both lower and higher income earners in Portugal, whereas in most other EU countries the later tend to have a negative wage premium. Finally, data for the education sector shows a higher ratio of primary teacher salary to per capita income than in other Europeans countries, another measure of relatively favorable compensation in the main public employment sector.

15. Portugal needs at the same time to continue improving skills in public administration. At present, lesser-qualified workers receive relatively high pay in the public sector compared to peers in the private sector as well as among more highly skilled civil servants. In addition, the wage grid is relatively flat and depends mostly on years of experience, rather than performance. This makes it difficult to attract highly qualified staff, because private sector opportunities (with lower entry salaries but steeper increases for performance) are considerably more attractive. To become more attractive, the civil service should identify specific jobs needed in the public sector (such as information technology experts) and revise the wage structure to offer competitive compensation.

⁶ Database from 86 country-level studies over the period 1991-2014 of wage levels in the public and private sectors controlling for differences in skill mix. Source: IMF Board Paper, 'Managing Government Compensation and Employment – Institutions, Policies, and Reform Challenges', 2016.

Figure 7. Wage Policy



1/ Public - private wage differential (as a percent of private wage): based on a review of regression studies that control for skill differentials between the public and private sector. Numbers are calculated by taking the within-country average over time

C. Policy Implications

16. To generate lasting fiscal savings, Portugal’s policy approach would need to move from across-the-board measures to deeper structural reforms. To achieve the sharp fiscal adjustment needed during the crisis, the authorities needed to resort to blunt but quick measures such as across-the-board attrition and temporary wage cuts. As in many advanced countries, such measures to reduce high wage bills proved successful in the short term, but could only be a temporary fix. Wage measures were gradually unwound and employment measures were diluted, as they proved difficult to sustain over the medium term. Reform fatigue led the government to suspend the implementation of structural pay policy reforms prepared during the adjustment program that aimed to generate durable savings. More recently though, the ongoing spending review created financial incentives for staff who identifies saving measures. Going forward, the recurrence of wage bill pressures associated with the unfreezing of career progression will require implementing structural reforms for more sustained wage bill adjustment.

17. Employment measures should rely on public sector restructuring to support staffing reallocation across sectors. Employment levels should be gradually aligned to future needs in key sectors, with a decrease in the education sector, and an increase in health sector in response to ageing. Some advanced countries have embarked on ambitious public sector restructuring to reduce public employment permanently while improving service delivery (IMF, 2016a). This approach relies on a functional review of the public sector to identify sectors where government employment can be reduced without adversely affecting service delivery, and an employee reallocation program. For example, reducing the number of teachers in the medium-term to align it with the expected decline in age-school population will require further restructuring of the school network. Consolidating

primary and secondary schools will however require careful policy design as it could lead to a worsening of access to school services, especially in rural areas. In the health sector, hiring pressures should be contained by further reducing reliance on large and costly hospitals and increasing the role of primary health care facilities. A larger transfer of responsibilities from doctors to nurses could also improve health costs (OECD, 2015). The ongoing spending review is expected to pursue some of these policies.

18. Containing public compensation will require structural wage measures. First, Portugal should develop comparisons between public and private sector wages to help inform wage negotiations. Some advanced economies conduct ad-hoc or regular comparisons to ensure that public-private sector wage differentials are contained or reduced. These benchmarking exercises should adopt a comprehensive approach of all factors that affect compensation level, including nonwage pay such as pensions and greater job security (IMF, 2016b). Second, wage increases and career progression mechanisms should reflect improvements in productivity. Third, efforts to streamlining non-wage compensation should be relaunched to reduce inequities among civil servants and improve transparency.

References

Maria M. Campos and al, 2015, 'Understanding the Public Sector Pay Gap,' Banco de Espana, Documentos de Trabajo 1539.

International Monetary Fund (IMF), 2016a, 'Board Paper Managing Government Compensation and Employment – Institutions, Policies, and Reform Challenges', IMF: Washington DC.

International Monetary Fund (IMF), 2016b, 'Board Paper Case Studies on Managing Government Compensation and Employment – Ireland,' IMF: Washington DC.

Javier J Perez and al, 2016, 'The Fiscal and Macroeconomic Effects of Government Wages and Employment Reform,' European Central Bank, Occasional Paper Series 176/August 2016.

Organization for Economic Co-operation and Development (OECD), Reviews of Health Care Quality, 'Portugal – Raising Standards', 2015.

THE YOUTH IN PORTUGAL THROUGH THE CRISIS¹

Inequality and poverty in Europe during the financial crisis has received widespread attention, but somewhat less discussed has been the social impact of the crisis across generations. In a context where Portugal's convergence toward lower European poverty and inequality standards has stalled over the last five years, the youth (aged 15-24 years) were especially affected by the downturn and adverse labor market developments.² Their income has not yet fully recovered to pre-crisis levels, and their risk of poverty is the highest of all age groups. The youth are disproportionately unemployed or in precarious forms of employment in the context of strong market duality. The social security system has better protected the elderly from the impact of the crisis, with the youth less well covered against unemployment and poverty risks. Going forward, policies should focus on further reducing labor market duality to improve job prospects for young adults, and rebalancing fiscal redistribution to combat poverty in young adults.

A. Rising Overall Inequality and Poverty in Portugal During the Crisis

1. The recent crisis affected both market inequality and income in Portugal (Figure 1). As measured by the Gini index, market inequality (before taxes and transfers) rose more in Portugal (+4.3 ppts) from 2009-2013 and is above the European average (OECD countries) and most peers. Median net income before social transfers largely declined (-14.1 percent) over 2009-2014, and underperformed European average, with Spain being the hardest hit among comparators (-24.1 percent).

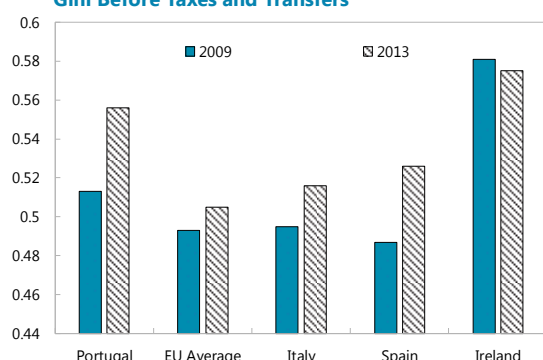
2. Inequality after social transfers and taxes remains high in Portugal per European standards, as the crisis halted a long term declining trend. Both the Gini index and income quantile ratio (S80/S20) point to long term downward trends in Portugal, but progress has stalled since 2010. Inequality remains above most peers and the European average, as Portugal experienced comparatively high inequality prior to the global financial crisis. In real terms, disposable income after taxes and social transfers declined for all deciles over the same period, and particularly for the bottom decile with a widening income gap between the poorest and the richest (Rodrigues, Figueiras and Junqueira, 2016).

¹ Prepared by Maximilien Queyranne. The author would like to thank the authorities for their comments.

² The share of the youth (15-29 years) in total population also declined sharply, from 21.7 percent in 2001 to 16.9 percent in 2011, with a large contribution of net migration outflows at the end of the period (Vieira and al., 2016).

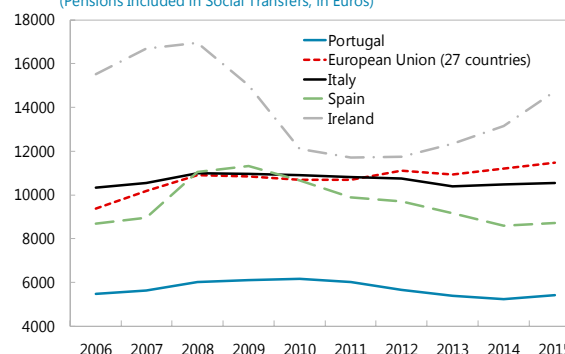
Figure 1. Inequality Developments¹

Gini Before Taxes and Transfers



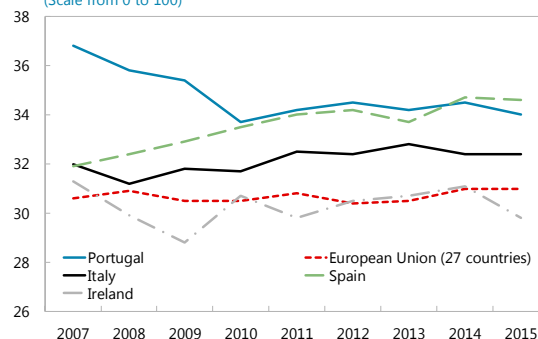
Sources: OECD.

Median Equivalized Net Income Before Social Transfers
(Pensions Included in Social Transfers; in Euros)



Sources: Eurostat.

Gini Coefficient of Equivalised Disposable Income
(Scale from 0 to 100)



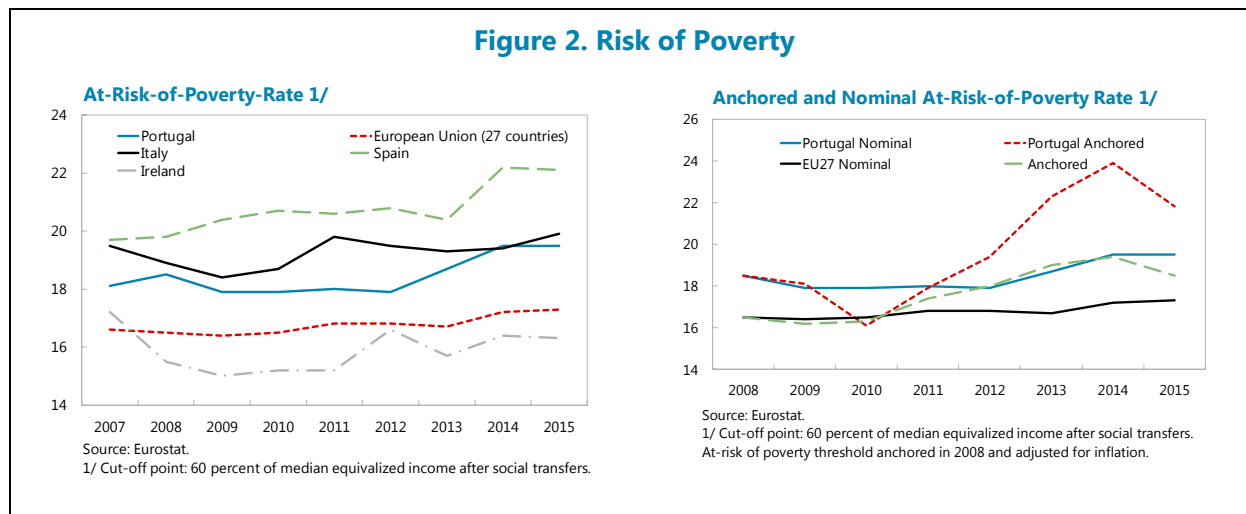
Source: Eurostat

¹Eurostat data on inequality and poverty refers to the survey year, not the income reference year, which is generally the previous year.

3. The risk of poverty rose recently in Portugal (Figure 2).³ Almost 20 percent of Portugal's population is at-risk-of poverty in 2015, an upward trend (+1 ppt) relative to 2007, somewhat comparable to European peers and the EU average.⁴ The anchored at-risk-of-poverty, which neutralizes the impact of the decline in the median income experienced by some countries, shows an even larger increase in Portugal (+3.3 ppt) and to a lesser extent in Europe on average (+2.0 ppt).

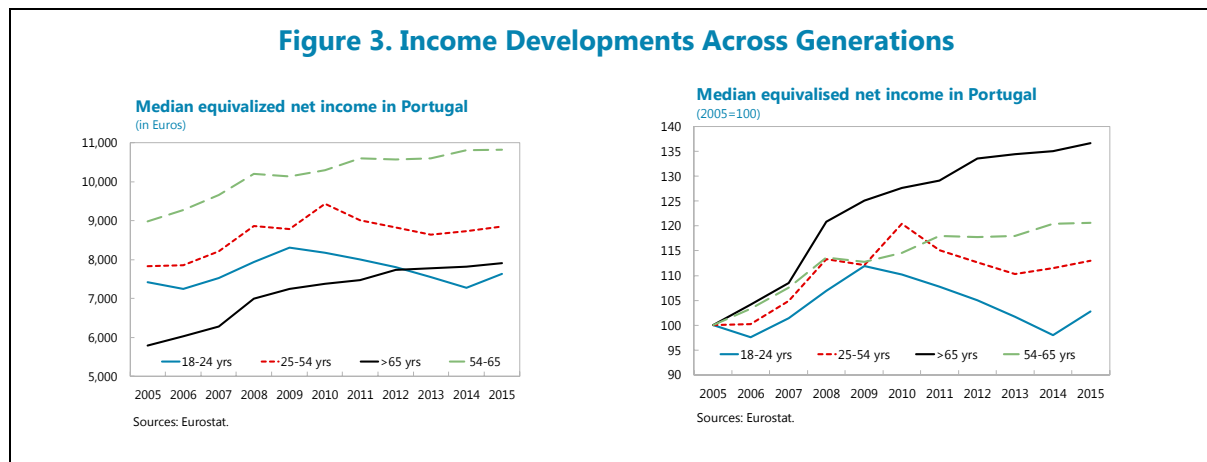
³ The at-risk-of-poverty is defined by the share of the population (age group) below 60 percent of equivalized median net income.

⁴ Recent data from the Portuguese National Statistics Institute points to a small decrease in the poverty rate in 2015, but it still remains above 2012 levels.



B. The Young Were Hit Especially Hard by the Crisis in Portugal

4. **Youth incomes were particularly affected in the wake of the crisis (Figure 3).** Their disposable income declined from 2009 and remained below pre-crisis level in 2014, while it improved for other working age adults. Pensioners, who had the lowest level of income in Portugal before the crisis, experienced the largest rise in income over the same period, and their median equivalized net income has surpassed that of the youth. The rest of Europe has experienced similar trends, with the youth being especially hard hit by the crisis.

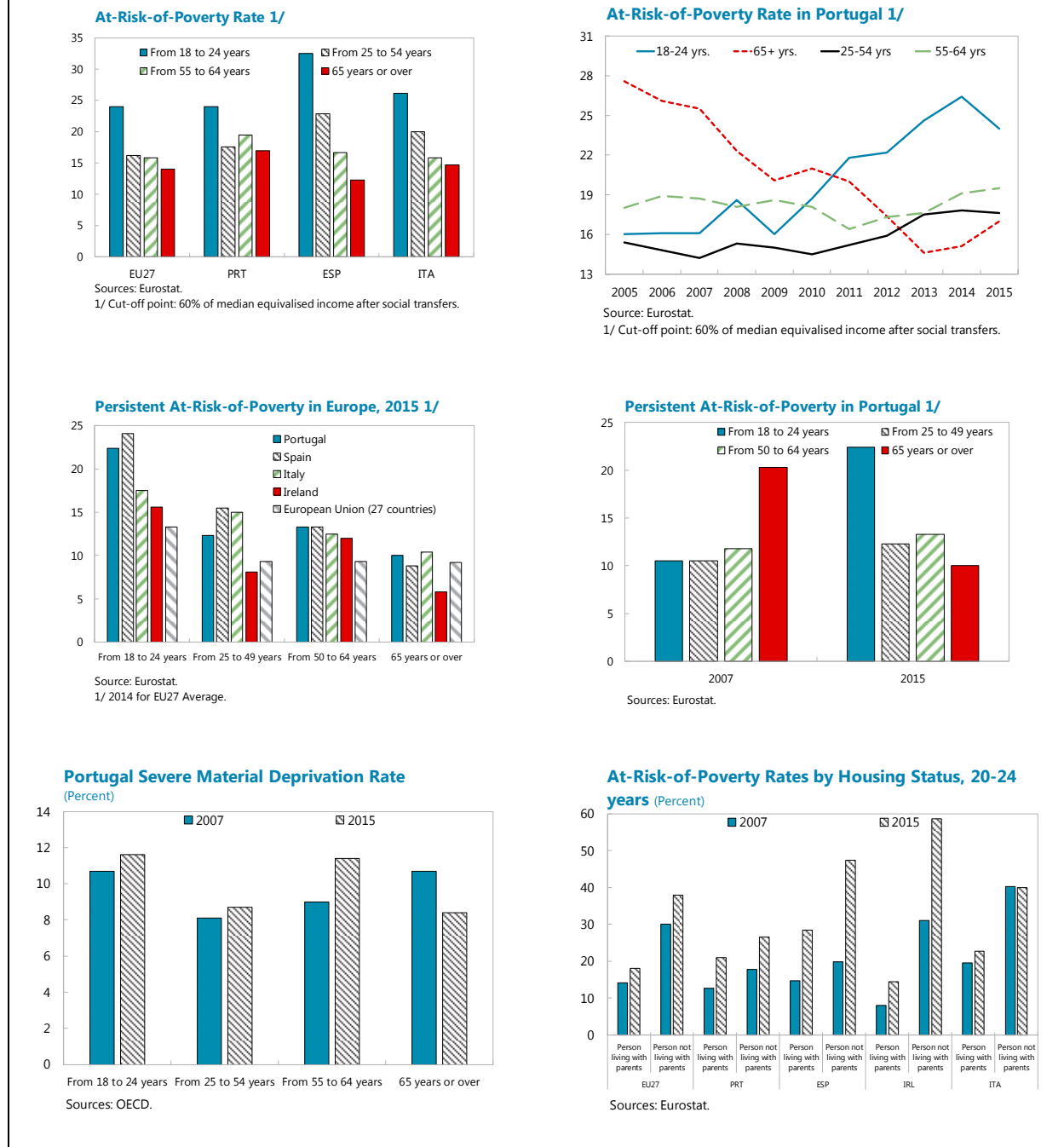


5. **The young became more at-risk of poverty than other age groups in Portugal (Figure 4).** The risk of poverty in Portugal shows a relatively different profile than in the rest of southern Europe, somewhat lower for younger generations (18-24 and 25-54 years), and higher for older generations (55-64 and + 65 years). But almost a quarter of the young in Portugal are at-risk of poverty (+8 percentage points relative to pre-crisis levels), the highest level across age groups. The risk of poverty increased more for the young than the other working age generations from 2005-2015, while it has fallen among the elderly (-9 ppt). The risk of poverty is higher for the youth not

living with their parents, although they appear more protected than in the rest of Europe. Relative poverty developments have therefore been particularly negative for the youth, while the elderly became better off. The latter, who used to face much higher risk of poverty than in most advanced European countries, have continued converging toward European peers' standards. The persistence of poverty is particularly high among the youth in Portugal and per European standards.⁵ Similarly, absolute poverty (measured as severe material deprivations) is the highest among the youth in Portugal.

⁵ An individual is at persistent risk of poverty if his income is below the poverty threshold (60 percent of median equivalized income) in the current year and at least in two out of the three previous years.

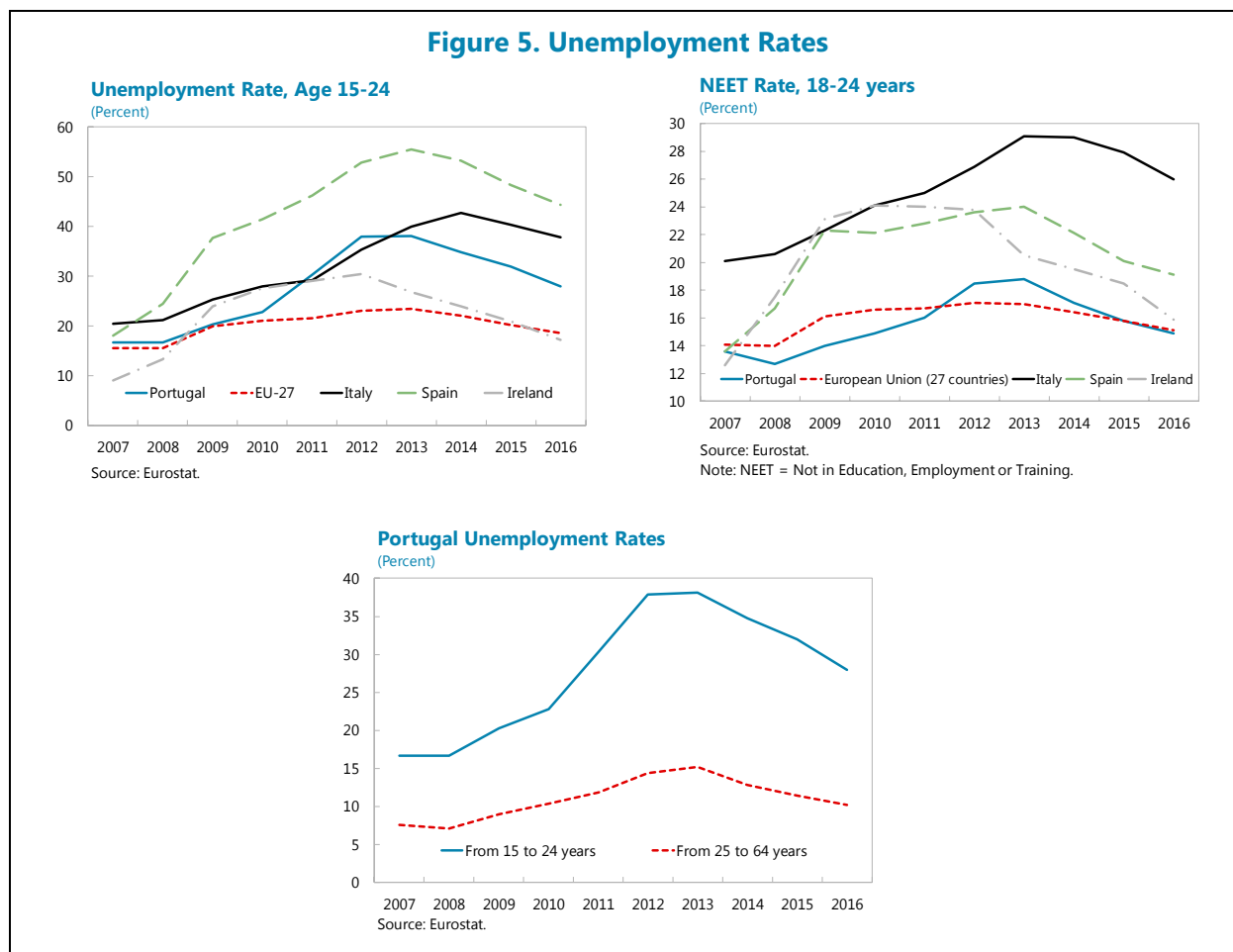
Figure 4. At-Risk-of-Poverty Across Generations



C. Adverse Labor Market Developments Affected Disproportionately the Youth

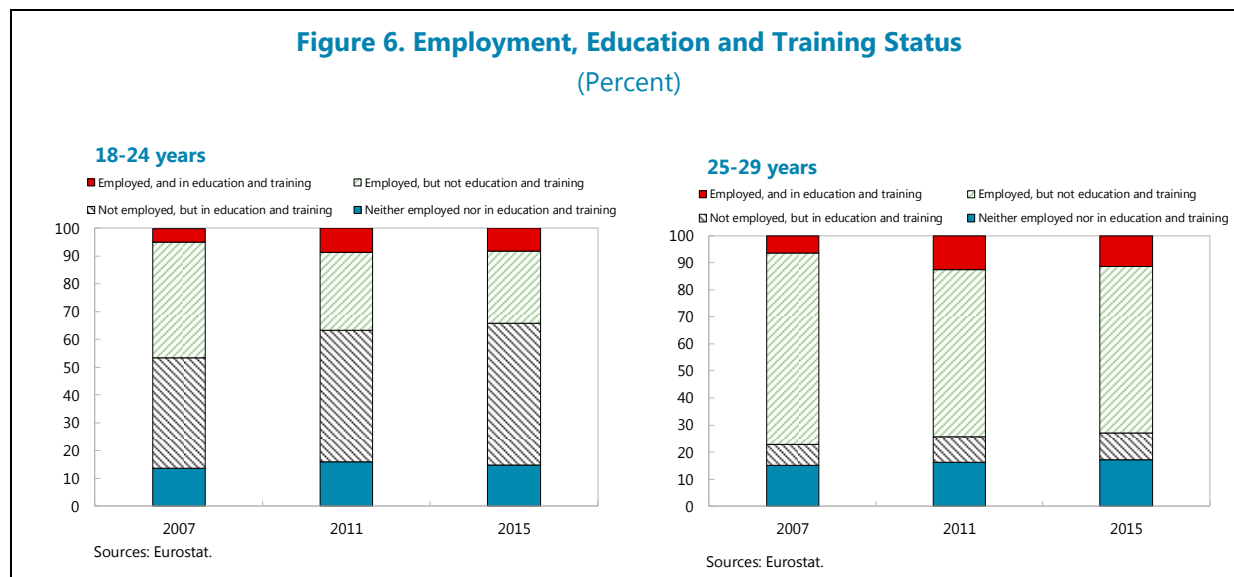
6. Even though Portugal better contained the rise in youth unemployment relative to comparators, the young generation was still the hardest hit during the crisis (Figure 5). The youth unemployment rate rose more than two-fold from 2007-2013 in Portugal, and has declined

since then. These unfavorable developments during the crisis were however less pronounced than in Italy and Spain, but remained largely above the European average and that of Ireland. But the youth were the hardest hit in Portugal, when compared to older working age population. The share of the youth labor force not employed, or involved in education or training (NEET), a more accurate measure of youth unemployment, appears more contained than in comparator countries.



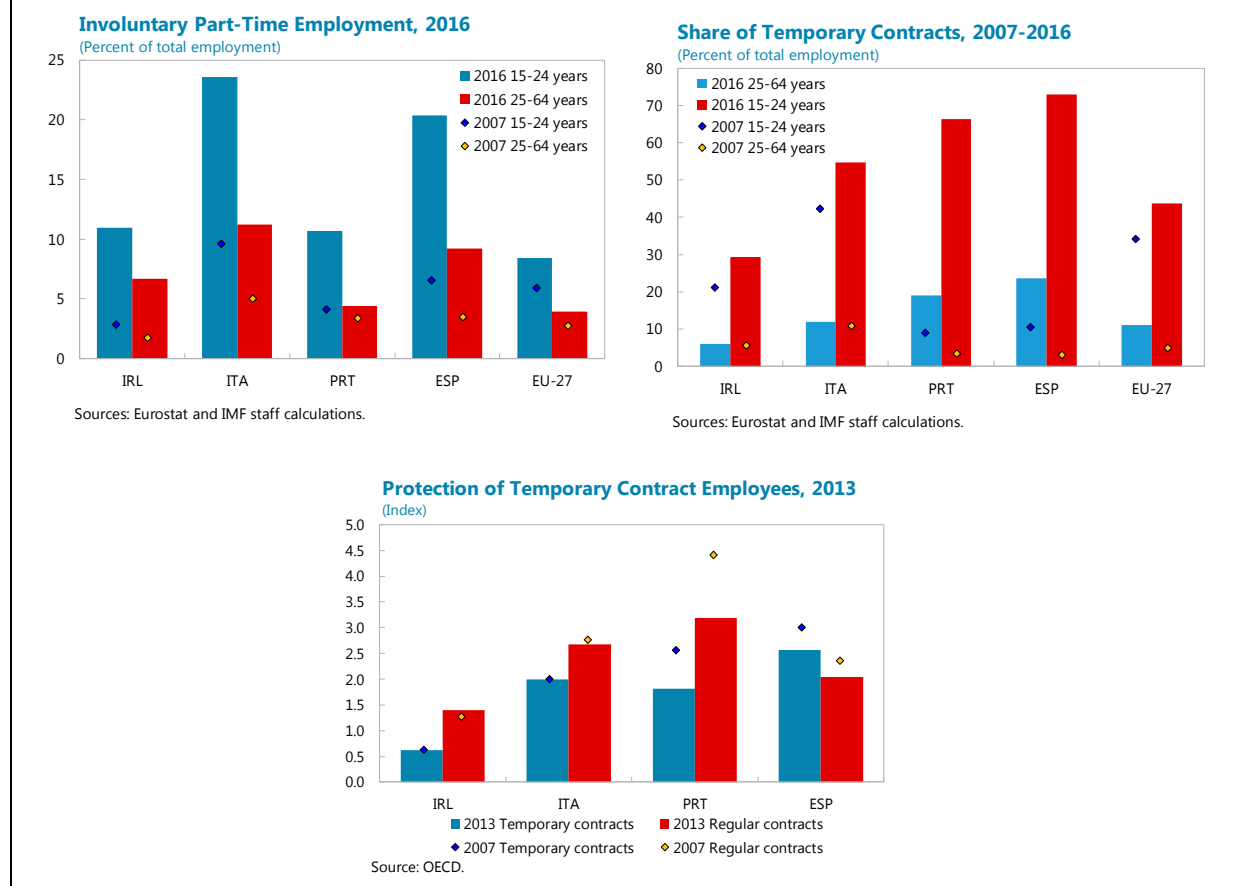
7. The transition from education to work has become more difficult and lengthier for the young generation (Figure 6). The share of those aged 18-24 years employed largely declined, driven by those who were employed but not in education nor in training. At the same time, those only in education or training rose sharply, possibly reflecting both an increase in access to tertiary education, but also difficulty in finding a job. Developments are comparable among those aged 25-29 years, albeit a large majority of them are employed. The share of not employed nor in education and training is higher among the 25-29 years than that of the 18-24 years and still rising, pointing to possible hysteresis effect for the generation which was transitioning from education to work during the crisis. Young people are affected by increasingly precarious and intermittent forms of employment, leading to less linear transition from education to work and successive postponements of entry into the labor market. Nearly one third of the young people took until up to three months to find a job, and 1/5 more than a year (INE, 2016). After entering the labor market, the youth

increasingly experience a succession of inactivity, unemployment, informal employment, precarious and short-term employment, and vocational training courses (Vieira and al, 2016).



8. The working young are more likely to be impacted by strong labor market duality (Figure 7). The young are disproportionately affected by involuntary part-time employment and temporary contracts than older workers. The share of youth with involuntary part time unemployment has doubled from 2007-2016, and about 2/3 of them have a temporary work contract. Over the same period, these indicators of job insecurity remained somewhat stable among older working age population in Portugal, pointing to a strong duality of labor market in Portugal for younger workers. Protection of temporary and regular workers was reduced from 2007, but regular employees remain more protected in Portugal than in Italy and Spain, and temporary employees relatively less protected. Given higher proportion of temporary workers among the youth, they are likely to be more affected by strong labor market duality.

Figure 7. The Young and the Labor Market

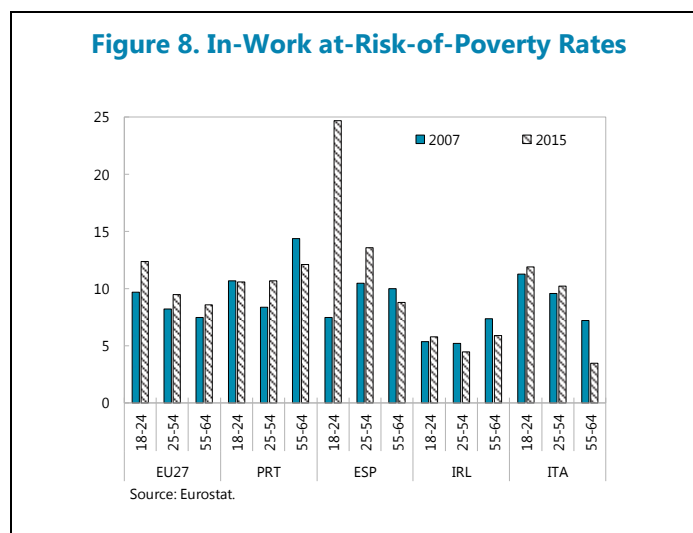


9. Recent reforms temporarily improved the eligibility of the young for unemployment benefits, but they remain poorly covered. Portugal temporarily increased unemployment benefit coverage for younger age groups at the onset of the financial crisis. However, the benefit coverage ratio relative to the older working age population declined and was one of the lowest in the Euro area in 2013 for those aged 15-24 years at about 10 percent (Leschke, 2015). In addition, the duration of unemployment benefits depends on the age of the beneficiary, with those aged below 30 receiving benefits for a shorter period (Arnold and Rodrigues, 2015).

10. Portugal has put in place labor market policies to reduce youth unemployment. From 2012-2016, the first job of young workers benefited from a total exemption of social security contributions for three years. This was recently transformed into a partial exemption (50 percent) of social security contributions for a period of five years to incentivize employers to lengthen the duration of the youth first work experience. In addition, employers receive subsidies when converting young workers' temporary contracts into permanent contracts from mid-2017. Finally, spending on active labor market policies, which are comparatively low in Portugal despite positive effect on youth unemployment (IMF, 2014) is being reformed to better support traineeships through financial incentives to convert them into permanent contract.

11. The high minimum wage protected the youth that were employed against the risk of in-work poverty, but may have had a detrimental effect on youth unemployment (Figure 8).

The risk of in-work poverty among the youth has stabilized from 2007-2015 at a level below the European average and most peers. It is also below other working age generation, in contrast with most comparators. This may reflect that Portugal's minimum wage is comparatively high relative to the median wage (OECD, 2015), and to a lesser extent to the mean wage (International Labor Organization, 2017).⁶ These ratios may become even higher, as minimum wage was increased in real terms by 1.5 percent in 2014, 2.5 percent in 2015, and 3.7 percent in 2016 (Ministry of Labor, Solidarity and Social Security, 2016). These rigidities, while protecting the working youth, may have indirectly led to an increase in youth unemployment, as wages could not adjust downwards. Higher minimum wages are indeed associated with higher youth unemployment in most countries in Europe, while the effect on older worker unemployment is insignificant (IMF, 2014).



D. The Social Protection System Better Protects the Elderly than the Young

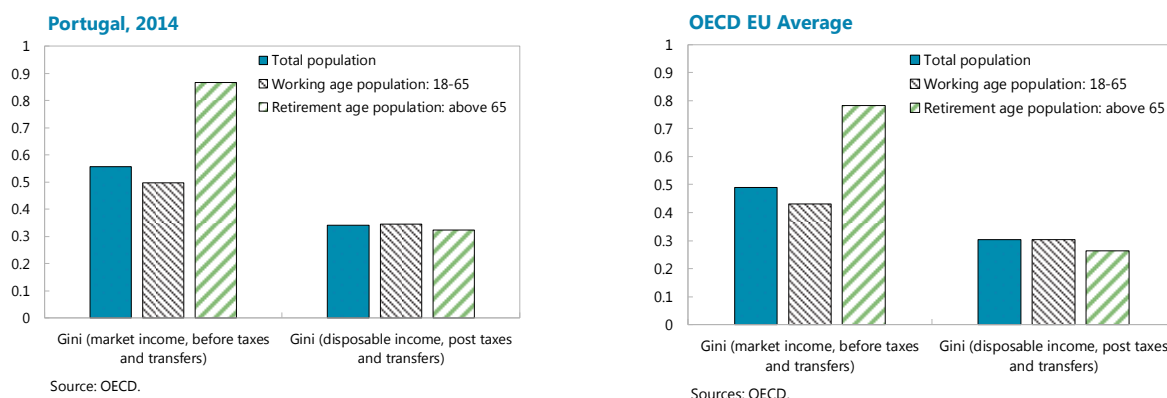
12. In a context of sharp macroeconomic shocks and high unemployment, demand for redistribution is strong and rising in Portugal. Preference for redistribution is particularly high in Portugal relative to European average and peers.⁷ There is a broad social consensus for expenditure and revenue measures to reduce inequality and poverty.

13. Fiscal redistribution is geared toward reducing income inequality through pensions (Figures 9). As in other European countries, the Portuguese social protection system was primarily designed to provide the elderly with income replacement benefits. It has been successful in bringing the elderly's higher market inequality down to the inequality levels of other age groups after social taxes and transfers. In Portugal, as in most European countries, pensions contribute more than any other social benefits or taxes to the reduction in the Gini coefficient. In particular, Portugal introduced in 2006 a means-tested minimum pension benefit (*Complemento Solidario para Idosos*) which proved particularly effective in fighting old age poverty (Arnold and Rodrigues, 2015).

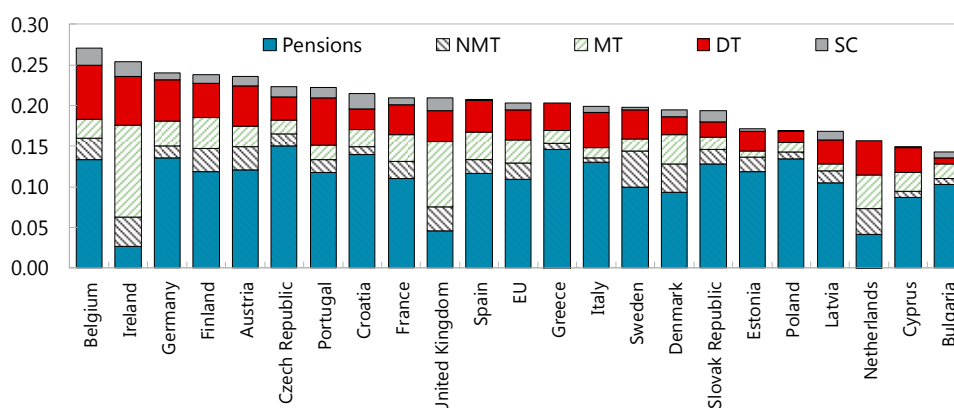
⁶ In 2013, Portugal had the highest minimum wage to median wage ratio in Europe, and the 7th highest minimum wage to mean wage in Europe.

⁷ Demand for redistribution is measured by the answer to the question: "Government should take measures to reduce differences in income levels" of the European Social Survey. Scores range from 1 to 5 for the period 2006-2014 in 16 European countries. Portugal scores 4.3 in 2014 (+0.1 point compared to 2006), whereas the EU16 average is 3.9 percent (+0.1 point).

Figure 9. Redistributive Impact of Taxes and Transfers (Gini Scores)



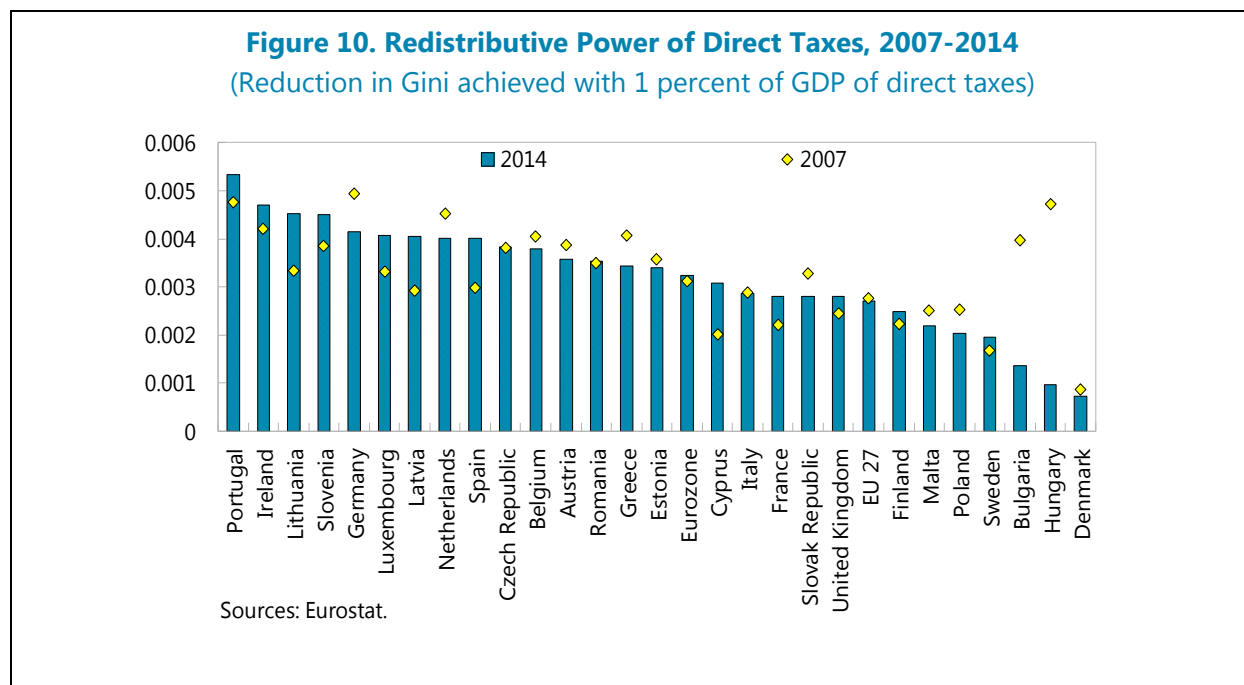
Taxation and Spending: Contributions to the Reduction in the Gini (2015 or latest)



Sources: Eurostat and IMF staff calculations.
 Note: SC= Social Contributions; DT=Direct Taxes; MT=Means -tested social spending; NMT=Non-means-tested social spending.

14. Pension benefits were relatively protected during the crisis, especially for some low-income pensioners. During the adjustment program, the indexation of pension benefits was suspended, except for some minimum pension benefits. The temporary deindexation (cancelled from 2016) reduced real benefits in 2011 and 2012 when inflation was above 3 percent, before its impact waned in a context of lower inflation. In addition, most pension cuts were cancelled by the Constitutional Court, both for the public pension scheme (suspension of the holiday and the Christmas allowances) and for all pension schemes (sustainability contribution). Overall, pension benefits appeared to have been more protected than the working age population income that was impacted by high unemployment following the crisis.

15. Direct taxes play a larger role in reducing inequality in Portugal (Figure 10). Relative to other European countries, direct taxes contribute more to the reduction in inequality in Portugal (Figure 9). However, the recent reversal of the extraordinary solidarity contribution, a progressive tax levied on pensioners introduced during the adjustment program, is likely to reduce the redistributive impact of direct taxes across generations.



16. In Portugal, pension spending crowds out other social spending, especially social assistance benefits (Figure 11). Pension expenditures (old age and survivors’ benefits) contributed to almost all the net increase in social spending from 2007-2014, while disability and sickness benefits declined over the same period. Social assistance spending (1.4 percent of GDP) appears low by European standards, and has declined by about 0.3 percent of GDP from its peak in 2009, while more than 50 percent of NEETS did not receive any income support in Portugal, as in other Southern European countries (European Social Protection Committee, 2015).

17. Going forward, age-related spending will further reduce the scope for other social transfers to support younger age groups. Portugal would be among the countries in the euro area the most adversely affected by demographic developments. Pensions and healthcare public

spending would increase by more than 7 percentage points of GDP under the baseline over 2015-2100 (Queyranne, 2016), leaving no room for additional support to younger generations, in a context of already high public debt.

E. Policy Implications

18. The nature of inequality and poverty in Portugal, and more broadly in Europe has changed dramatically.

High unemployment and precarious job status, which particularly affect the youth, were magnified during the financial crisis, resulting in a growing income and poverty gap across generations.⁸

19. Therefore, priority should be given to improving job prospects for young adults in Portugal.

Policy measures could include (i) reducing labor market duality, to improve prospects of the young generation to access less precarious jobs; and (ii) containing labor costs by limiting minimum wage increases.

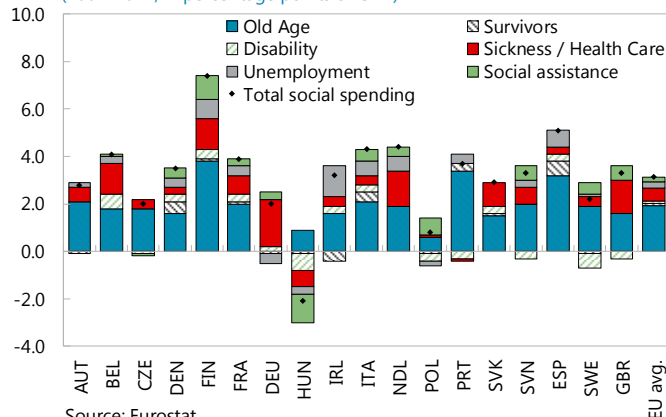
20. Fiscal redistribution should also be rebalanced to reduce poverty among the young and inequality across age groups.

The social protection system has been historically designed to reduce old age poverty. This goal has been largely achieved in Portugal. However, social protection systems remain ill-equipped to address the impact of high youth unemployment and precarious job status. Better protecting the young can be achieved through: (i) reforming unemployment and non-pension benefits to better address challenges arising from high youth unemployment; and (ii) increasing the redistributive impact of taxation, including across generations.

Figure 11. Composition of Social Insurance and Assistance Spending

Composition of the Changes in Social Spending

(2007-2014, in percentage points of GDP)

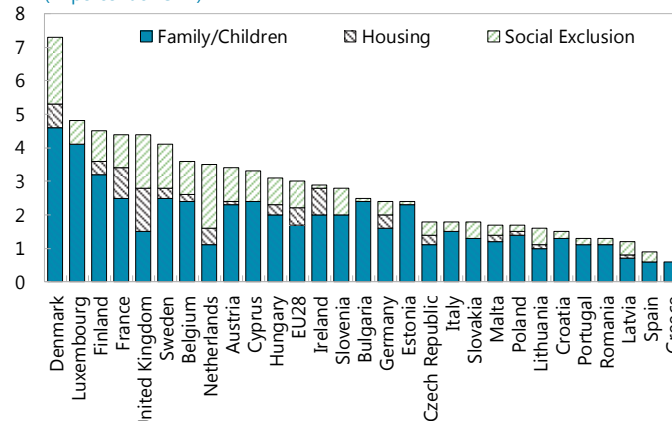


Source: Eurostat.

Note: Social assistance covers family/children, social exclusion, and housing.

Components of Social Assistance Spending

(In percent of GDP)



Sources: Eurostat.

⁸ The Flash Barometer of the European Parliament (EP EB 295, 2014) reports that most of the young people (62 percent for 21-to-25-year old; 52 percent for 16-to-20-year old) have the feeling that they have been marginalized (defined as excluded from economic and social life in their country) during the crisis.

References

- Arnold Jens, and Carlos Farinha Rodrigues, 'Reducing Inequality and Poverty in Portugal,' OECD Economic Department Working Papers 1258, 2015, OECD: Paris.
- European Social Protection Committee, 'Social Protection and Youth Exclusion in the EU', SPPM Thematic Review on the 2013 Social Trends to Watch, 2015.
- Instituto Nacional de Estatística, 'Young people on the Labour Market – Labour Force Survey ad hoc module 2016,' 2016.
- International Labor Organization, 'Global Wage Report 2016/17: Wage Inequality in the Workplace,' 2016, ILO: Geneva.
- International Monetary Fund (IMF), 'Youth Unemployment in Advanced Economies in Europe: Searching for Solutions,' Staff Discussion Note 14/11, 2014, IMF: Washington DC.
- Queyranne Maximilien, 'Policy Options to Mitigate the Impact of Adverse Demographic Developments' Portugal 2016 Article IV, Selected Issues Paper, IMF: Washington DC.
- Leschke Janine, 'Recent Trends and Reforms in Unemployment Benefit Coverage in the EU,' European Commission – Social Situation Monitor: Seminar on coverage of unemployment benefits, 2015.
- Ministry of Labor, Solidarity and Social Security, 'Livro Verde Sobre As Relações Laborais 2016,' 2016, Portugal.
- OECD, 'Pension at a Glance 2015,' 2015, OECD: Paris.
- Rodrigues Carlos Farinha, Rita Figueiras, and Vitor Junqueira, 'Desigualdade do Rendimento e Pobreza em Portugal, 2009-2014,' 2016, Fundacao Francisco Manuel dos Santos.
- Vieira Maria Manuel, Victor Sergio Ferreira, and Jussara Rowland, 'Retrato da juventude em Portugal: traços e tendências nos censos de 2001 e 2011,' Revista de Estudos Demográficos, nº 54, Lisbon.

PUBLIC FINANCING IN A NEW ENVIRONMENT¹

Portugal's public debt is projected to remain high over the medium-term, with significant refinancing needs that will require continued access to international markets. The ECB's quantitative easing has provided considerable support for the sovereign debt market over the past two years, but markets remain sensitive to both domestic and external economic and financial developments. With the financing environment likely to be less benign as monetary accommodation is eventually reduced, Portugal needs to build on current favorable economic and financial environment, with attention to: (i) continued proactive debt management; (ii) durable fiscal consolidation to reduce public debt and build fiscal space; and (iii) macro-financial policies to promote stability and boost growth.

A. Introduction

1. The IMF's Article IV staff reports since the end of Portugal's adjustment program in 2014 have consistently noted the vulnerabilities posed by the high stock of public debt. While the headline fiscal deficit has steadily declined since the end of the program as macroeconomic conditions have improved, public debt remained close to its all-time high at the end of 2016. As a result, staff assessments have focused on the need for durable structural fiscal consolidation to put debt on a firmly downward trajectory and reduce exposure to shifts in market conditions as supportive cyclical conditions ease.

2. Portugal has benefited from access to financing on broadly favorable terms since their return to the market, allowing for a steady improvement in the structure of public debt. Borrowing conditions have been supported in part by the European Central Bank's (ECB) Public Sector Purchase Programme (PSPP), which was launched in early 2015. The relatively stable market access paired with proactive debt management operations has led to both an extension in the average maturity of public debt and a reduction in borrowing costs, with the effective interest rate on state direct debt declining from 3.6 percent in 2014 to 3.2 percent in 2016.

3. While market conditions have improved considerably during 2017, Portugal has nonetheless experienced periods of significant volatility over the past two years. In late 2016 and early 2017, the spread on Portugal's 10-year sovereign bond widened to between 300 and 400 basis points, with the average maturity of new issuance declining in 2016 as market conditions became more challenging. Portuguese spreads have declined substantially since peaks in mid-March 2017 following positive macroeconomic developments (including the exit from the EU's Excessive Deficit Procedure (EDP) and improved growth outlook), but the sharp movements in yields demonstrate the inherent sensitivity of investor sentiment.

4. Going forward, public financing still faces challenges, despite a cyclical upturn and the improvement in investor sentiment toward Portugal this year. While the relatively favorable maturity structure of Portugal's public debt limits the near-term impact of rising yields, debt

¹ Prepared by Erik Lundback and Matthew Gaertner.

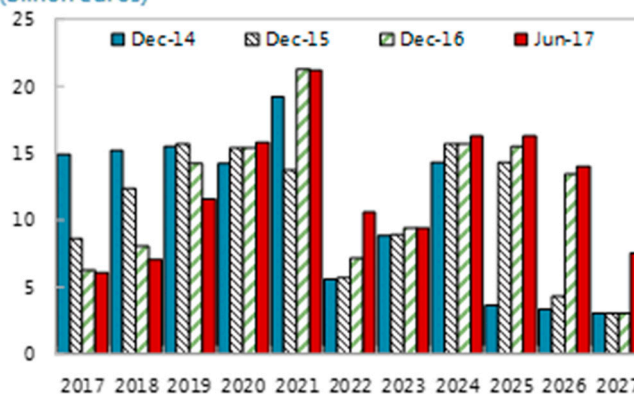
redemptions will rise in the next several years and a less supportive financing environment increases the risk of sudden fluctuations in market conditions. Ensuring sustained access to market financing at reasonable terms depends on sustained fiscal consolidation and economic growth to put debt on a firm downward trajectory and support investor confidence.

5. This note aims at providing further background analysis of these developments, identify challenges, and outline policy priorities. The next section examines recent developments in public debt issuance and profile; section C describes market developments and the role of the PSPP; section D discusses the importance of fiscal and macro-financial fundamentals for public financing; and the last section brings out key challenges going forward and outlines policy implications.

B. Recent Developments in Public Debt Issuance and Profile

6. While public debt as a share of GDP remains close to its all-time high, the cost of borrowing and maturity structure have improved. Public debt stood at 130.3 percent of GDP at end-2016, up from 129 percent at end-2015, as borrowing to finance the recapitalization of state-owned bank Caixa Geral de Depositos (CGD) offset the reduction in the headline fiscal deficit. Since Portugal’s return to financial markets in early 2013, the share of long-term securities in total debt has steadily increased to close to 50 percent at end-2016, while the share of short-term securities declined somewhat from 9½ to 8 ½ percent of the total. Demand for retail products has strengthened considerably in recent years, with a steady increase in retail financing since 2013 (Box 1). As a result, at end-2016 retail financing accounted for more than 10 percent of outstanding debt, up from less than 6 percent in 2012. The amount of outstanding loans through the EFSM and EFSF continues to account for about 20 percent of the debt stock, meanwhile, with an average maturity of about 15 years.²

Scheduled Redemption of Medium- and Long-Term Debt (Billion euros)



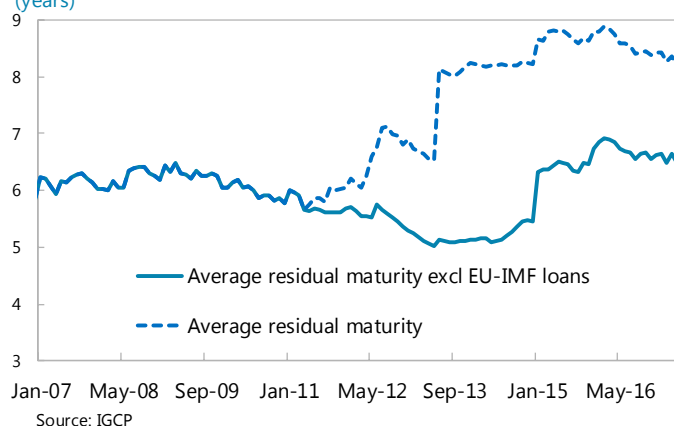
Sources: IGCP, Staff Calculations

² In addition, most recently, the government has been granted a 15 year €2.3 bn. loan from Santander, to pay for settlement related to claims on state owned enterprises.

7. More favorable market access since the end of the IMF-supported program and the start of the PSPP have allowed the average maturity of public debt to be extended.

From end-2014 through February 2016, the average residual maturity of non-EU/IMF debt rose from 5.5 to 6.9 years. Although the average maturity of new issuance shorted in 2016 as market conditions became more difficult, resulting in a modest decline in the residual maturity of non-EU/IMF debt to 6.3 years at end-June 2017, this still represents a much-improved maturity structure in a longer perspective.

Residual Maturity of Portuguese Government Debt
(years)



8. Portugal was also able to reduce public debt amortization requirements during 2017-19, although refinancing needs rise sharply in the medium-term. Through debt buybacks and early repayments of the IMF, redemptions (excluding retail certificates, debt certificates for public entities, and T-bills) were substantially reduced for 2017 and 2018, and to a lesser extent for 2019. The annual redemptions of T-bills have stayed largely constant in the past few years. However, at the same time, the redemption spike in 2021 became even higher, due to issuance of treasury bonds and floating rate notes maturing in 2021. To some extent this reflected market conditions in the last quarter of 2016, as bond issuance centered on five-year bonds maturing in April 2021 as demand tilted towards shorter maturities. It was also due to the intentional switch from shorter maturity IMF debt. Public gross financing needs are therefore projected to spike in 2021, although they would still be lower than in 2015 and 2016.

9. Favorable access to market financing has allowed early repayment of more than half of Portugal's borrowing from the Fund. Portugal's outstanding credit from the Fund now accounts for only about 5 percent of public debt, with additional prepayments planned that would reduce the share to less than 2 percent by mid-2019 (according to tentative plans). The early repayments have served to both help extend the overall maturity profile of public debt and reduce interest costs, with current market conditions allowing Portugal to replace borrowing from the IMF with longer-term and lower-cost market financing.³

10. In addition, the cost of financing has declined with more favorable market conditions. By 2016 the implicit interest rate on outstanding debt had declined from 4.1 percent in 2011 to 3.2 percent. The implicit interest rate on their annual issuance fell to 2.8 percent in 2016 from a peak of 5.8 percent in 2011 (although this was marginally higher than in 2015).

³ The current final average residual maturity of Portugal's borrowing from the IMF is below 4 years, with an average interest rate of around 4.6 percent. Portugal has hedged their currency exposure on these SDR-denominated loans.

Box 1. Retail Financing

A key feature of public borrowing in recent years has been the larger share of retail financing. Net retail financing accounted for about half of net debt issuance during 2014-2016, and is projected to account for nearly three-fourths of net issuance in 2017.

Retail instruments are comprised of savings and treasury certificates,¹ and five-year floating rate bonds (introduced for the first time in 2016). These instruments are offered in smaller subscription amounts in order to make them accessible to individual investors, with the interest rate set as a spread over Euribor. The amount of outstanding retail instruments has more than doubled since the end of 2013, rising from 6 percent of total state debt to 12½ percent at end-June 2017.

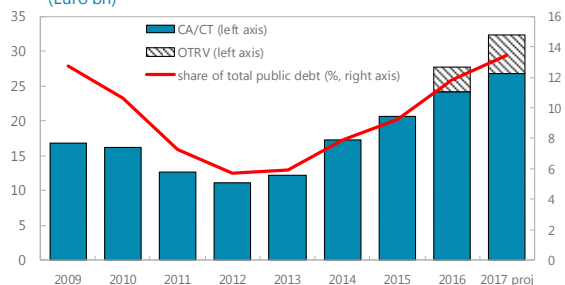
The demand for retail instruments in recent years appears to have followed the interest rate differential relative to bank deposits. There were steady outflows from retail instruments during 2010-2012 as the Euribor to which retail products are linked fell sharply, resulting in a large gap relative to bank deposit rates. In addition, the terms of outstanding perpetual savings certificates were changed in the years before the crisis, making them less attractive. The differential has narrowed since 2013, however, reflecting increased liquidity in the domestic banking system, while the spread on retail instruments was increased in 2012, contributing to the resurgence in demand for public retail debt.

The increase in retail financing has helped to diversify the investor base and reduce the cost of borrowing, but there are limits to further growth in this segment. The larger share of retail investors has helped to reduce Portugal's heavy reliance on external creditors, while retail financing proved much more stable than regular market based financing during the crisis. Nevertheless, the pace of retail issuance will likely need to moderate in recent years in order to avoid overexposure to financing from households. One additional concern is the potential for crowding out of bank deposits; while retail deposits have continued to rise in recent years, continued large inflows into retail products could begin to have an impact on bank deposits and prompt increases in bank deposit rates to retain deposits.

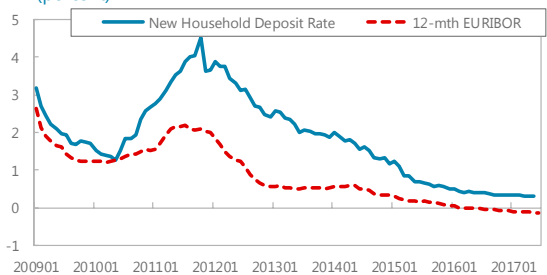
Annual Change in Public Debt (Euro bn)



Retail Debt Issuance (Euro bn)



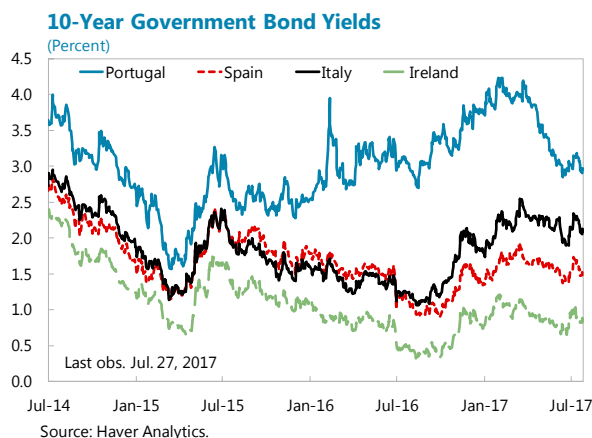
EURIBOR and Bank Deposit Rates (percent)



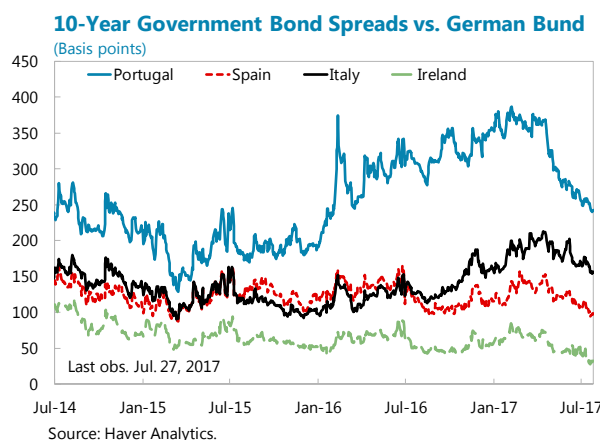
¹Retail certificates have 5- and 10-year maturities but can be redeemed early without penalty. The rate on the savings certificates includes a holding premium of 0.5 percent from the 2nd to the 5th year and 1 percent from the 6th to the 10th, while the rate on Treasury certificates increases each year in order to create an incentive against early redemption. Treasury certificates also have an additional premium tied to real GDP growth in their first two years.

C. Market Developments and the Role of the PSPP

11. Long-term sovereign yields and spreads have been on a steady downward trend since mid-March 2017, reversing the increase in the preceding six months. The ten-year bond yield reached almost 4.30 percent in March 2017, with the spread vis-à-vis the German government 10-year yield at about 390 basis points. This was followed by a decline to below 3.0 percent and 240 basis points, respectively by end-July, 2017, in quite sharp contrast to the upward trend in yields and spreads throughout most of 2016. The improvement in market conditions appeared to reflect several positive developments that helped reduce uncertainty over the near-term outlook, including the favorable 2016 fiscal outcome, strong recent economic growth numbers, and political developments in Europe.

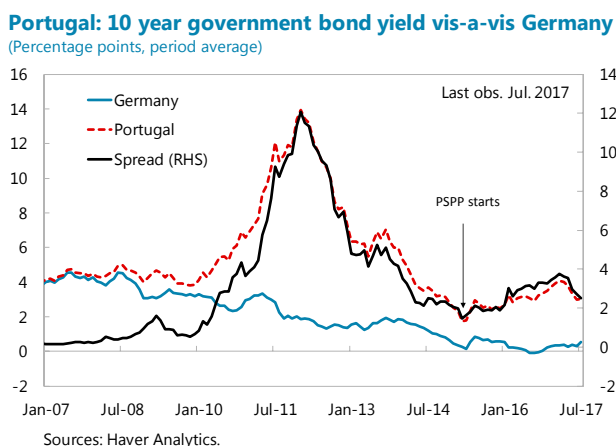


12. At the same time, long-term yields and bond spreads remain relatively high, and the quite recent volatility highlights the sensitivity of market sentiment. While the gap has narrowed, Portuguese bond yields are still above other southern European economies (except Greece), while the spread vis-à-vis the German bund implies a significant premium and cost. What is more, yields have proven to be quite sensitive to shifts in investor sentiment, with the risk of a reversal if perceptions of vulnerabilities that pushed them up in 2016 and early 2017 were to return.



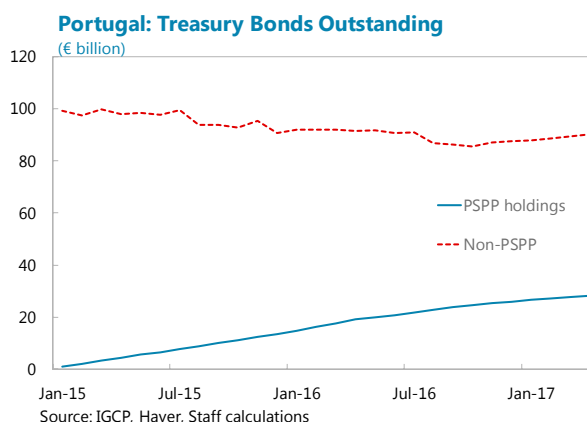
The role of PSPP

13. The announcement of the PSPP on March 9, 2015 had an immediate positive effect on Portuguese government bond yields. The 10-year yield dropped to a record low and the spread vis-à-vis the German bund narrowed to its smallest in five years. Yields rebounded shortly thereafter, but it seems clear that the sovereign debt purchases under PSPP were a significant factor in the stabilization of government bond yields at reduced levels. The

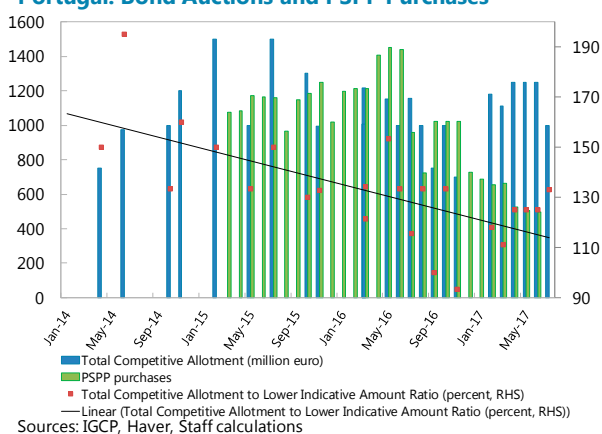


support provided by PSPP was also evident in the run-up in yields during the third quarter of 2016, which reflected market speculation that the rating agency DBRS may downgrade Portugal to below investment grade during their review in October 2016, which would have made Portuguese bonds ineligible for PSPP purchases.⁴ Similarly, Portugal's 10-year bond yields jumped by 23 basis points immediately following the ECB's decision on December 8, 2016 to extend PSPP to December 2017 but leave the issuer limit, implying a reduction in monthly purchases of Portuguese debt by the ECB.⁵

14. The large role of PSPP for Portugal's market access could also be seen in volumes, while Portugal's cash buffer provided support when market conditions were weaker. In 2015, the total accumulated net PSPP purchases of Portuguese bonds covered almost 90 percent of net issuance, and in 2016 the coverage exceeded 200 percent, and as of June 2017, the ECB's holdings of Portuguese sovereign bonds amounted to nearly one-third of the total outstanding.⁶ As PSPP purchases started to decline in the latter half of 2016, bond auction volumes also declined; allotted amounts trended closer to the lower indicative amounts, and



Portugal: Bond Auctions and PSPP Purchases



PSPP net purchases		
	2015	2016
<i>as share of</i>		
Gross Financing		
total	20.4	23.0
less T-bills	29.5	32.9
Bond Issuance (OT)		
gross	44.2	79.1
net	87.1	205.3
<i>net of SMP redemptions</i>		
<i>as share of</i>		
Bond Issuance (OT)		
gross	34.4	61.4
net	67.7	159.3

Source: IGCP; Haver Analytics; and staff calculations.

⁴ PSPP eligibility hinges on DBRS, as the major rating agencies continue to have a below investment grade rating on Portugal's sovereign debt.

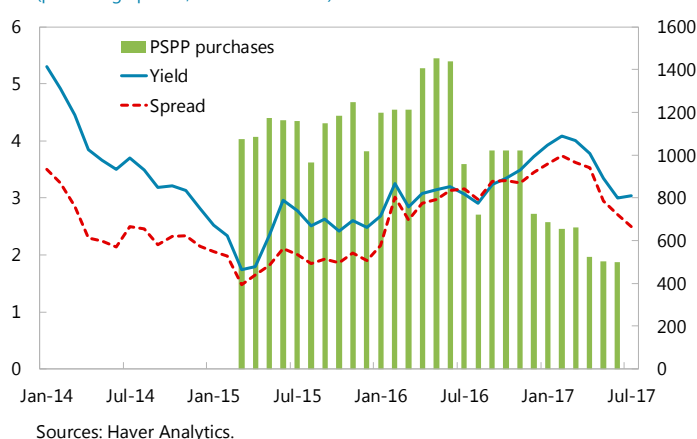
⁵ The program was extended to the end of 2017, with the minimum eligibility maturity lowered from 2 to 1 year, but the issuer limit of 33 percent was not increased, which Portugal is close to. Through May, average monthly PSPP purchases had declined by 45½ percent compared to 2016.

⁶ Including SMP holdings.

syndicated transactions became more costly, as reflected in a relatively high yield for the €3 billion syndicated transaction completed in January, 2017.⁷ In this period, during the fall of 2016 and 2017, Portugal's cash buffer allowed the authorities to manage their debt issuance to avoid stretching the maturities and volumes, thereby reducing the effects of market volatility.

15. Yields have fallen during 2017 despite the decline in the ECB's purchases of Portuguese debt following the extension of PSPP. While the ECB opted to extend the program to the end of 2017, the issuer limit of 33 percent was not increased. With Portugal already approaching the issuer limit in late 2016, this implied a reduction in the level of the ECB's monthly purchases in order to retain a relatively consistent profile until the end of the program. The initial announcement of the terms of the extension was met with rising yields and spreads, but this was quickly reversed after March following positive news about economic and fiscal developments. Spreads and yields fell markedly despite a sharp reduction in average monthly PSPP purchases of Portuguese bonds, down 47 percent in the first half of 2017 compared to 2016, which has been a much larger decline than for PSPP as a whole. This is a clear illustration of the centrality of fiscal and macro-financial fundamentals.

Portugal: PSPP and 10-year yields and spreads
(percentage points, millions of euros)



D. Challenges and Implications

16. The medium-term vulnerabilities posed by the large debt stock leave sizable challenges for public financing. While the near-term outlook has improved, public debt is projected to remain elevated with the level of public debt projected to remain well above the 85 percent DSA threshold of GDP even by 2022, leaving little fiscal space in the event of unanticipated shocks.⁸ Portugal will need to continue to tap international markets on a regular basis, and remain vulnerable to shifts in investor sentiment that could increase borrowing costs. In addition, Portugal's investor base continues to rely on a substantial share of foreign investors and is limited by Portugal sub-investment grade rating from Fitch, S&P and Moody's.⁹ Key weaknesses

⁷ The yield was 4.23 percent for a 10-year bond.

⁸ Fiscal space is an assessment of whether a government has scope to ease fiscal policy without endangering market access and debt sustainability. This assessment is based on a consideration of market access, present and future financing needs and an analysis of the solvency of the fiscal position under possible policy actions.

⁹ Fitch revised its outlook in June 2017 to positive from stable, but left the rating unchanged.

weighing on the ratings include high public debt, relatively low potential growth, and still fragile banks due to the large stock of impaired loans.

17. The improvement in market conditions despite the decline in PSPP purchases illustrates the importance of sound macroeconomic policies to support investor confidence.

Yields have declined in 2017 even as monthly PSPP purchases have been reduced as the improved near-term growth outlook and progress in addressing fiscal and banking challenges have helped improved investors' perceptions of Portugal. However, investor sentiment toward Portugal can change quickly, as it has in the past, particularly as markets begin to transition to an environment in which the ECB may provide less support through the purchases on the secondary market.¹⁰ Portugal needs to take advantage of the current favorable economic and financial environment to be prepared for a potentially more challenging financing environment, with a focus on: (i) *continued proactive debt management*; (ii) *reducing public debt and building fiscal space*; and (iii) *macro-financial policies to promote stability and boost growth*.

Continued proactive debt management

18. Proactive debt management has been a hallmark of Portugal's efforts to build a sound public financing position. Current favorable market conditions should be seen as a window of opportunity to further extend debt maturity, smoothing the redemption path, and avoiding large clusters of debt service payments that can create unnecessary financing pressures. The profile of redemptions can be smoothed by lengthening maturities on new issuance and continuing to conduct buybacks of shorter-term debt, as has been the practice in the past. Portugal's large cash buffer has also helped improve their resilience against adverse market fluctuations in recent years. Cash reserves should be maintained at a sufficient level to provide an adequate cushion, prepare for debt service peaks, and allow managing potential episodes of market volatilities and pressure. The authorities' current goal of maintaining a 50 percent minimum monthly liquidity coverage of borrowing requirements over the next 12 months (excluding T-Bill rollover) seems to strike an appropriate balance between the costs of maintaining a large cash buffer and the security provided by additional liquidity.¹¹

Reducing public debt and building fiscal space

19. Durable structural fiscal consolidation is essential to put the public debt trajectory on a firmly downward trend. High public debt is still a considerable risk and the financing environment is likely to be less benign as monetary accommodation is eventually reduced. While the

¹⁰ Staff estimates the share of non-resident holdings of medium- and long-term securities to be almost 40 percent (excluding the ECB) and almost $\frac{3}{4}$ of investors in 10-year syndications have been from outside Portugal in 2017.

¹¹ Portugal has agreed to keep a cash buffer sufficient to meet this level of financing coverage as part of the waiver of *pari passu* requirements on EU loans to allow further early repayments to the IMF. The requirement falls to 40 percent once Portugal has at least one rating of BBB-/Baa3 with stable outlook or higher by either Fitch, Standard & Poor's or Moody's.

better growth outlook has improved near-term debt dynamics, high public debt remains a significant vulnerability.

20. The favorable cyclical conditions provide an auspicious opportunity for more ambitious structural consolidation. Fiscal policies need to be disciplined to reduce above the line financing needs, and interest savings should not be spent. The main goal of debt operations must be to further stabilize and make financing conditions more robust, not to reduce near-term interest spending. A long-term view will ultimately lead to the most cost efficient financing.

Macro-financial policies to promote stability and boost growth

21. Portugal's recent experience shows the importance of a stable and growing economy for public debt dynamics. While the near-term outlook has improved as the cyclical recovery has gained momentum, the current recovery is expected to moderate over the medium-term without additional financing to support a sustained increase in the level of investment. As discussed in this year's Article IV consultation, key areas include addressing the high levels of non-performing loans in the banking sector and the weak balance sheets of many businesses, and boosting potential growth through higher investment and enhanced competitiveness. Strengthening financial stability, potential growth, and competitiveness remain of direct and essential relevance for public financing.

22. Such policies, paired with a robust fiscal strategy policies, can pay immediate dividend through further improved market sentiment and a broadening of the investor base. The rating agencies have consistently pointed to public debt, financial stability and the growth outlook as key considerations in their assessment of Portugal. A ratings upgrade would significantly expand the investor base for Portuguese sovereign debt and offset the impact of any further decline in the level of support to the sovereign debt market provided through PSPP.