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LUXEMBOURG

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April 27, 2015

Approved By
European Department

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LUXEMBOURG TAX POLICY CHALLENGES[1]

Luxembourg's predictable and generally low-rate tax system has helped establish it as a leading financial and commercial entrepôt and has supported its fiscal revenues. Its revenue base could, however, be susceptible to changes in the EU and global tax environment. While the various international tax initiatives that motivate this chapter remain in early stage, it would nonetheless behoove Luxembourg, as a sovereign with top credit standing and a track record of fiscal responsibility, to assess the challenges and formulate policy responses preemptively, where the effort should be to diversify revenue sources and strengthen the tax system over the medium term.

A. Introduction

1. **This chapter considers features of the Luxembourg tax system that may be susceptible to changes in international tax transparency standards and surveys related policy options**. Luxembourg has the lowest value added tax (VAT) rates in Europe; low excises for fuel, alcohol, and tobacco; and, as other countries, a range of deductions and exemptions that reduce its effective corporate income tax (CIT) rate. This system has helped make Luxembourg a hub for international financial and commercial operations while also stimulating cross border retail demand. Taxing the resulting activities brings in over one-quarter of general government revenue, where some portion could be susceptible to changes in EU and international tax standards, rules, and practices. This highlights the need for advance planning, including a careful exploration of options to make the tax system more robust, where Luxembourg's upcoming tax policy review is thus timely.

B. Winds of Change

2. **Potential challenges to Luxembourg's tax base arise from various sources** (*Staff Report*, Box 1). The OECD/G20 Base Erosion and Profit Shifting (BEPS) project and similar initiatives at EU level may lead to changes in tax standards that could reduce incentives for certain multinational corporations (MNCs) and banks to domicile their operations in Luxembourg. European Commission state aid probes in selected cases introduce additional uncertainty. Separately, proposed changes to U.S. federal taxation of unrepatriated past and future profits of U.S. companies could cause affected firms to repatriate some or all of their Luxembourg profits, with an impact on the collection of associated revenues in Luxembourg. Some estimates suggest U.S. firms booked up to $40 billion of profits in Luxembourg in 2013, or about 8 percent of their overseas total (Zucman, 2014). Finally, EU energy tax reform has been debated since 2011, and in early 2015 the OECD recommended that, to reduce carbon emissions, Luxembourg should increase taxes on petrol and diesel to gradually eliminate price differentials with neighboring countries (OECD, 2015).

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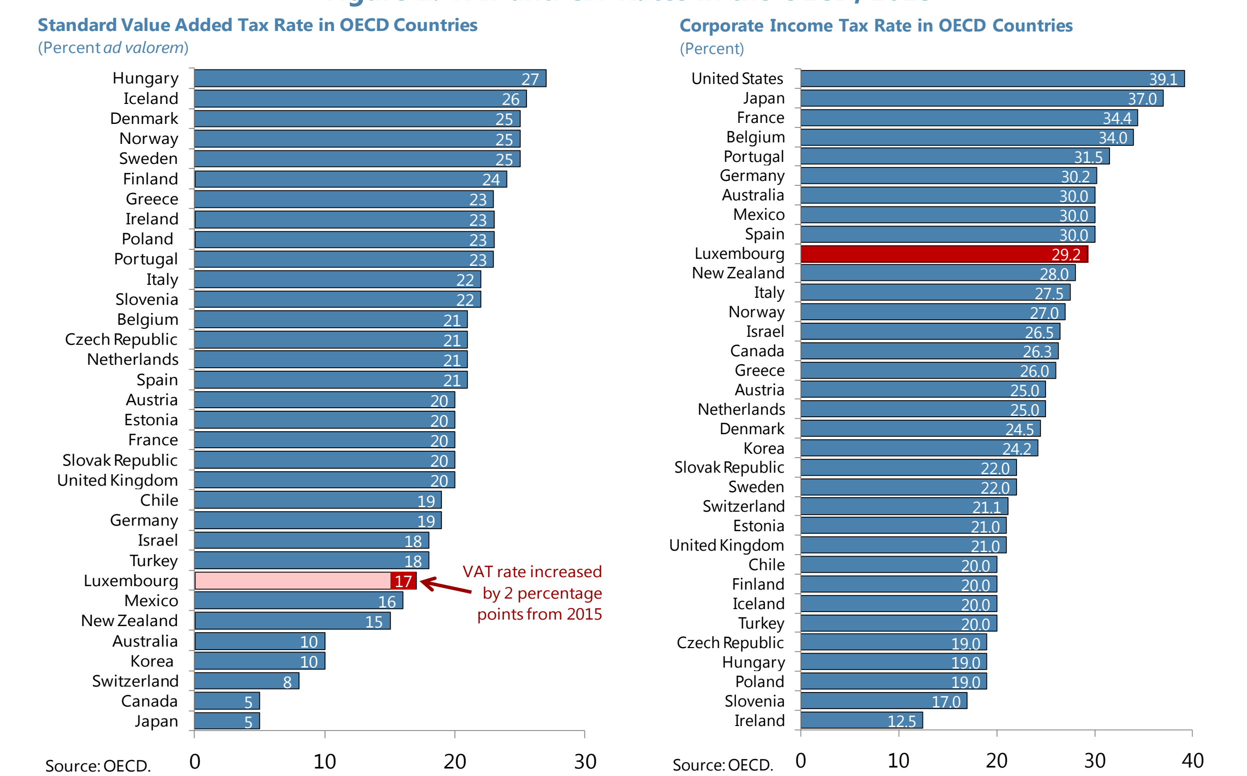
[1] Prepared by Michael Gorbanyov, with inputs from Piyabha Kongsamut (both EUR). Detailed comments from the Luxembourg authorities on an early draft are gratefully acknowledged.

3. **Luxembourg has already responded to these challenges with many positive steps**. It is among early adopter countries that have committed to implement the OECD *Standard for Automatic Exchange of Financial Account Information in Tax Matters* from 2017. Within the EU, Luxembourg has begun to share firm specific advance tax rulings (ATRs) on a bilateral basis on request, and has expressed support for EU proposals to make such exchanges automatic. A Grand Ducal decree adopted in December 2014 strengthened procedures for ATR approval by creating a legal basis, clarifying information requirements, and creating a special committee to review applications. In the area of bank secrecy for individuals, Luxembourg has adopted mandatory automatic exchange of information on interest payments under the EU Savings Directive, taking effect in 2015. It has also agreed to adopt an extension of that Directive covering account balances and other sources of income including dividends, effective from 2017. Finally, the Luxembourg authorities are fully engaged in the BEPS deliberations, where they stress the importance of synchronized action by all countries and ensuring a level playing field more broadly.

C. Selected Features of Luxembourg's Tax System

4. **Luxembourg's VAT rates remain the lowest in the EU, and among the lowest in the OECD, even after the 2 percentage point rate increase that took effect on January 1, 2015** (Figure 1). The standard rate, now at 17 percent, is complemented by three reduced rates: an intermediate rate, now at 14 percent, on a range of financial services and wine; a reduced rate, now 8 percent, on gas and electricity; and a super reduced rate, unchanged at 3 percent, on water, pharmaceuticals, most food products, broadcasting services, some housing, and printed materials.

Figure 1. VAT and CIT Rates in the OECD, 2013



5. **Luxembourg's CIT rate is among the highest in the OECD although, as in most countries, exemptions apply** (also Figure 1). The statutory CIT rate, 29.2 percent, remains below statutory rates of 30.2–34.4 percent in neighboring Belgium, France, and Germany. Available tax exemptions, under domestic law, tax treaties, and the EU Parent-Subsidiary Directive, allow qualifying companies to reduce their effective CIT rates. Luxembourg also offers a favorable tax regime for intellectual property (IP) rights, where up to 80 percent of net royalties and capital gains derived from qualifying IP rights are excluded from taxation. Exclusions apply to patents, trademarks, designs and models, internet domain names, and software copyrights. The result is an effective CIT rate of about 5.8 percent for IP income, among the lowest in Europe (Evers et al., 2014). Qualifying IP assets are also exempt from net wealth tax (KPMG, 2012). Of note, Luxembourg is currently in the process of changing tax legislation applicable to IP.

6. **In addition to low VAT rates, Luxembourg also maintains excise rates on certain fuel, alcohol, and tobacco products that are generally below those of its immediate neighbors** (Table 1). Differences are particularly notable for specific excises on cigarettes and petrol, whereas for diesel two of the three neighboring countries have reduced rates on professional use. These Luxembourg excise rates, specific and *ad valorem*, are fully consistent with EU tax legislation, meeting or exceeding the applicable floors.

Table 1. Selected Specific Excises in Luxembourg and Neighboring Countries, 2014

(Euros)

	Beer (per degree Plato)	Wine (per hectoliter)	Sparkling wine (per hectoliter)	Cigarettes (per 1,000)	Fine cut tobacco (per kg)	Unleaded petrol (per 1,000 liters)	Diesel (per 1,000 liters)
Luxembourg	0.79	0	0	18.39	10.00	462.09	335.00
Belgium	1.85	57.24	195.88	36.89	16.50	615.23	428.84
France	2.95	3.75	9.29	48.75	67.50	624.10	468.20
Germany	0.79	0	136.00	96.30	46.75	654.50	470.40

Sources: EU, Excise Duty Tables on Alcohol, Energy and Tobacco, January 2015; and Luxembourg authorities.

7. **As in other financial hubs, investment funds benefit from favorable tax treatment, which, together with other factors, creates incentives to domicile in Luxembourg**. As in competing jurisdictions, benefits for funds in Luxembourg include exemptions from CIT, municipal business tax, and net wealth tax. Instead, such entities pay a *Taxe d'Abonnement* (subscription tax), currently set at 5 basis points of net assets under management annually for most funds, or 1 basis point for qualifying money market funds and special investment vehicles, with funds dedicated to certain socially important activities such as occupational retirement pensions and microfinance exempt from this tax (Elvinger and Le Sourne, 2013). Dividing receipts by average assets under management suggests an average effective subscription tax rate of about 2½ basis points in 2014.

8. **In addition, MNCs and banks doing business in Luxembourg can benefit from its wide network of tax treaties**. As of end 2014, Luxembourg had bilateral tax treaties with 75 countries and agreements with another 19 countries were under discussion (KPMG, 2015). This network covers all EU member states save Cyprus and almost all OECD countries. Intended to prevent double

taxation, the agreements allow foreign companies with Luxembourg-sourced income to obtain certain exemptions from Luxembourg taxes on dividends, interest on profit-participating loans, and other operations if they are subject to taxation in other jurisdictions.

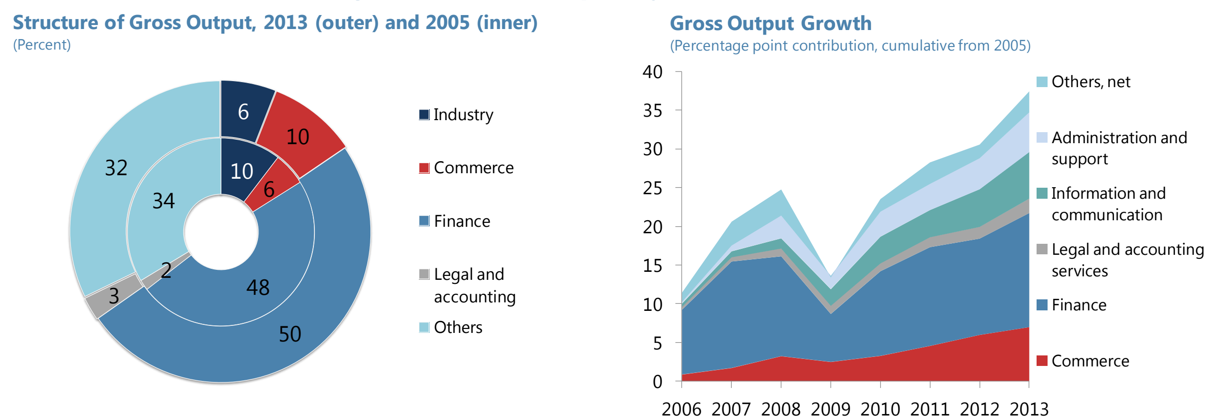
9. **To provide legal certainty, Luxembourg's tax authorities offer to qualifying taxpayers advance decisions concerning their envisaged operations per Luxembourg tax law**. The authorities may approve advance price agreements (APAs) on intercompany transfer prices or ATRs that lay out the expected tax treatment of specific operations. An ATR is binding for five years (with the possibility of extension) and subject to the principles of good faith and compliance (Deloitte, 2013). According to a January 2011 administrative circular, ATRs may be obtained only by companies where the Board and a majority of directors are based in Luxembourg. APAs and ATRs are strictly confidential, mirroring similar practices in most other EU and OECD countries, being understood that they can be exchanged on the basis of EU and international instruments.

10. **The combination of international rules and favorable national tax treatment has helped Luxembourg attract many large MNCs and banks**. A number of the world's largest and best known firms (including Microsoft and Apple's iTunes) choose to conduct business through Luxembourg. Some (such as Amazon and Skype) have selected Luxembourg as the location of their European corporate headquarters. This has cemented Luxembourg's role as an important jurisdiction for international financial and nonfinancial business.

D. Some Macroeconomic Effects

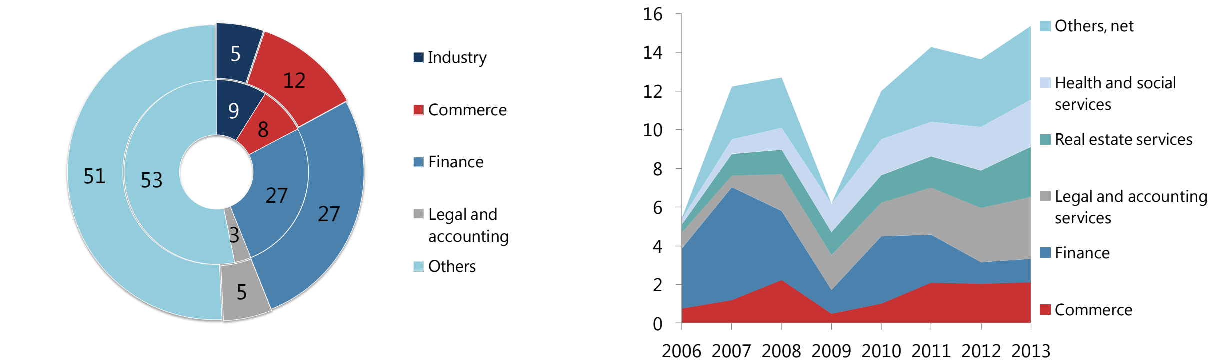
11. **Luxembourg's mix of fiscal stability, openness, conservative prudential oversight, and responsiveness to investor needs has served as a magnet for international financial business**. Net assets of investment funds have more than doubled since 2008, reaching €3½ trillion, or over 70 times GDP. Bank assets amount to €750 billion, or more than 15 times GDP. Gross output (turnover before deducting the value of inputs used, a measure of underlying economic activity) of the financial and insurance sector (financial sector hereinafter) accounts for nearly half of overall gross output (Figure 2). The financial sector contributed about 15 percentage points to the 37 percent cumulative expansion of real overall gross output over 2005–13.

Figure 2. Gross Output by Sector, 2005–13



Source: STATEC.

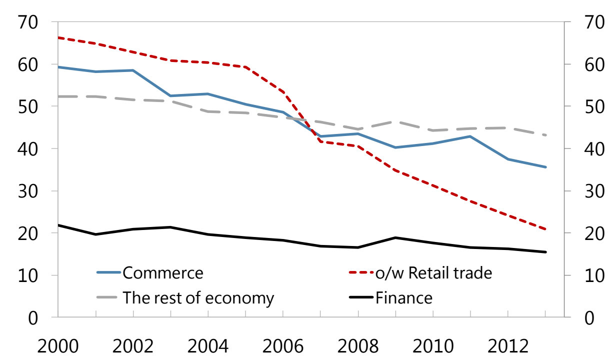
Figure 3. Value Added by Sector, 2005–13



Source: STATEC.

12. **Strong growth of intermediary operations in the financial sector, however, limits the sector's value added and thus its contribution to GDP**. The sector contributed just over 1 percentage point to the 15 percent cumulative expansion of real overall value added (gross output less intermediate consumption) in 2005–13 (Figure 3). Over the same period, the share of value added in financial sector gross output (a proxy for the margin) fell from an already low 20 percent to about 15 percent (Figure 4). In comparison, the share of value added in financial sector gross output in other European and Asian countries with large and internationalized financial sectors ranges from about 40 percent in Ireland to some 60 percent in Switzerland (Figure 5). The relatively low margin in Luxembourg likely reflects the dominance of fund related operations where value added—and thus the taxable base—is lower than for banks. These comparisons are blurred by measurement difficulties (Haldane, 2010). In any event, comparing Luxembourg's city state economy to that of larger countries (rather than the financial centers within them, say, London or Frankfurt) can yield biased results.

Figure 4. Shares of Value Added in Gross Output by Sector, 2000–13
(Percent)



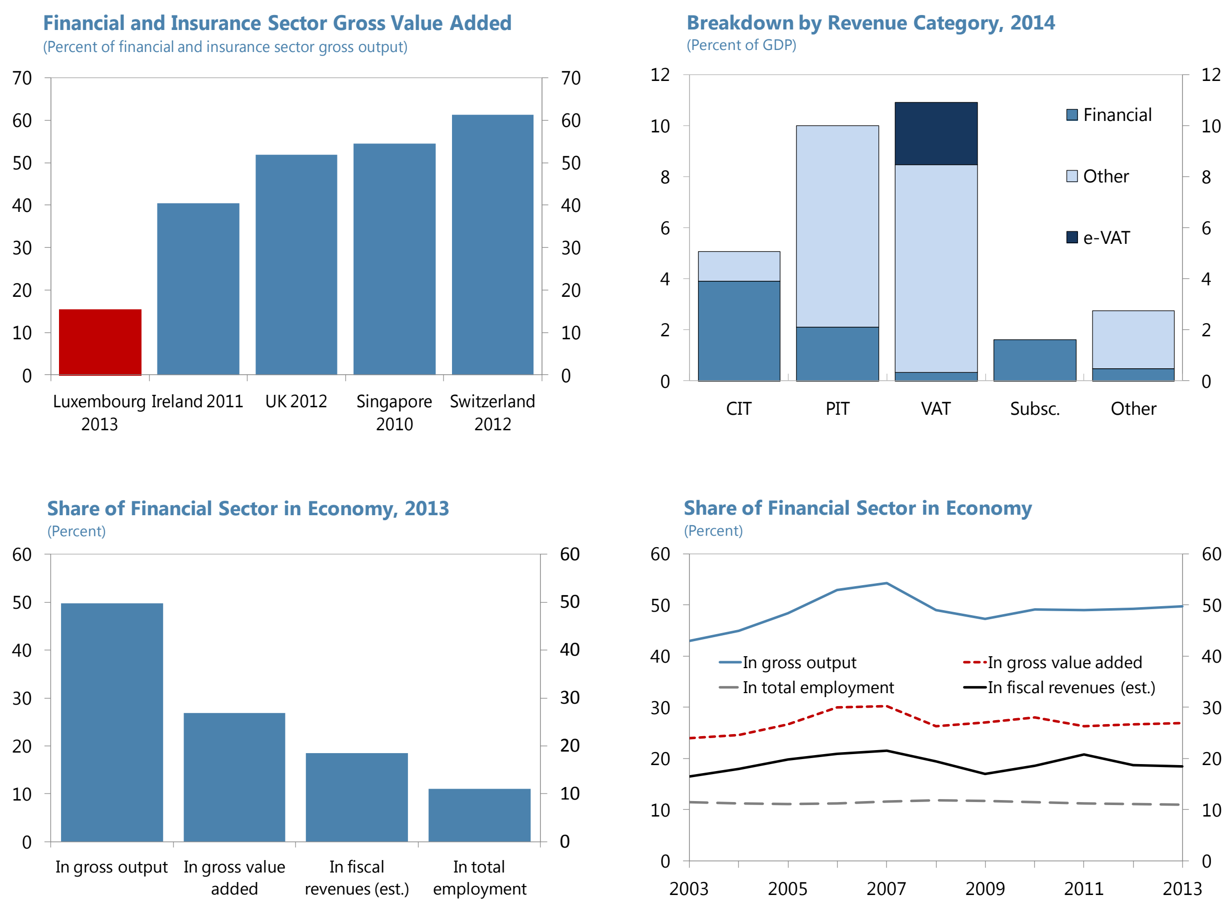
Sources: STATEC; and IMF staff estimates.

13. **In contrast, the real gross output of Luxembourg's commercial sector has more than doubled in the last eight years, with the impact on overall value added varying by subsector**. Gross output of the retail trade subsector increased by an estimated 270 percent in real terms over 2005–14. This expansion far outstripped real domestic demand growth over the same period, reflecting increasing cross border trade. In terms of real gross value added, the commercial sector as a whole grew by 25 percent over 2005–13. The sector thus contributed more than 2 percentage points to the 15 percent cumulative expansion of real overall gross value added over the period. In retail trade, however, gross value added stagnated despite strongly growing gross output.

E. Luxembourg's Revenue Receipts

14. **The financial sector's share in revenues is smaller than its share in value added** (Figure 5). Counting direct and estimated indirect revenues (following *Etude d'impact*, 2012, where indirect revenues include those from ancillary industries and employees' PIT), the sector generated more than 8 percent of GDP in revenues in 2014, or about 18 percent of general government revenues. This is well below the sector's 27 percent share in overall value added (and far below its 50 percent share in overall gross output). The sector's share in total revenues is down significantly from its pre crisis peak of about 21½ percent in 2007, and has remained broadly stable over the last three years. By revenue head, the largest contribution was CIT, followed by PIT, then subscription tax. Banks remain the largest source, although their share in total revenue receipts from the sector has slipped while that of *Soparfis* (financial management companies) has increased steadily (Table 2).

Figure 5. Luxembourg Financial Sector in Perspective, 2000–14



Sources: Haver Analytics; Luxembourg authorities; *Etude d'impact* (2012); and IMF staff estimates.

Table 2. Tax Revenues from Financial Sector, 2011–14 1/

(Percent of total)

	2011	2012	2013	2014
Banks	46.2	51.1	45.3	38.8
Soparfis	23.3	22.6	26.5	31.8
Fund managers	15.0	14.1	14.7	12.2
Others	15.5	12.1	13.6	17.2

Sources: Luxembourg Ministry of Finance; and IMF staff estimates.

1/ Sum of sector contributions to CIT, net wealth tax, and local business tax, plus PIT of employees; excludes subscription tax on investment funds and estimated revenues from ancillary activities.

15. **Luxembourg's ratio of overall CIT revenues to GDP is above those of its immediate neighbors, although the excess is gradually diminishing**. Luxembourg collected CIT worth about 4.9 percent of GDP in 2013, among the highest ratios for advanced economies and well above the 1.8–3.1 percent of GDP range for Belgium, France, and Germany (Table 3). At the same time, the statutory CIT rate in Luxembourg is somewhat lower than in those three countries (recall Figure 1), and the effective rate may be lower still. Taken together, these observations suggest that the higher CIT yield to a large extent reflects MNCs' and banks' decisions to set up their European headquarters in Luxembourg, although other country specific factors may also be at play given the small open city state economy. The positive differential in CIT collections between Luxembourg and its neighbors is gradually diminishing (Figure 6). Steady declines in both the ratio and its excess over the three neighbors since 2002 may in part reflect falling CIT rates (statutory and effective) in all four jurisdictions, as well as possible larger declines in the effective rate in Luxembourg.

Table 3. Corporate Tax Revenue in Selected Countries, 2013

(Percent of GDP)

Luxembourg	4.9
Belgium	3.1
France	2.6
Germany	1.8

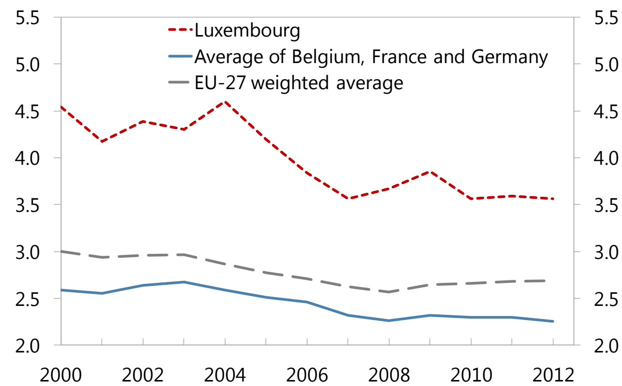
Source: OECD.

Figure 6. Corporate Tax Rates and Revenues, 2000–13

Sources: OECD; Eurostat; and IMF staff estimates.

16. **Low VAT and excise rates on fuel have helped induce cross border demand for petroleum products**. Retail fuel prices are generally lower than in neighboring countries. This creates incentives for nonresidents, particularly those who already commute to Luxembourg for work, to purchase their fuel in Luxembourg. According to estimates presented by Luxembourg's Cour des comptes (Court of Auditors) in its assessment of Budget 2015, residents contribute only about 17 percent of excise and VAT on fuel, with the rest paid by professional transit operators and other nonresidents (Table 4). In 2013, Luxembourg collected 2 percent of GDP in fuel excises, about 1½–2 times the levels in Belgium, France, or Germany (Table 5). From a peak in 2004, Luxembourg's total excise receipts have declined by more than those of its three immediate neighbors (Figure 7).

Figure 7. Excise Revenues, 2000–12
(Percent of GDP)



Sources: OECD; Eurostat; and IMF staff estimates.

Table 4. Luxembourg Fuel Taxes Paid by Residents and Nonresidents, 2014
(Millions of euros unless otherwise indicated)

		Nonresidents			
	Residents	Professional transit operators	Others	Sub total	Total
Excises	126.2	442.3	302.5	744.8	871.0
VAT	49.5	…	123.0	123.0	172.5
Total	175.7	442.3	425.5	867.8	1,043.5
Percent of total	*16.8*	*42.4*	*40.8*	*83.2*	*100.0*

Sources: *Cour des comptes*, 2014; and IMF staff estimates.

Table 5. Petrol and Diesel Prices, Excise Rates, and Fuel Excise Revenues in Luxembourg and Neighboring Countries, 2013

	Retail price (€/liter) 1/		Excise rates (€/liter) 2/		Fuel excise revenues 3/		Nominal GDP
	Petrol	Diesel	Petrol	Diesel	€ bn.	Percent of GDP	(€ bn.)
Luxembourg	1.22	1.05	0.46	0.34	0.9	2.0	45.3
Belgium	1.49	1.26	0.61	0.43	4.3	1.1	395.3
France	1.40	1.20	0.62	0.47	24.3	1.1	2,113.7
Germany	1.42	1.21	0.65	0.47	36.6	1.3	2,809.5

Sources: 1/ Price of Unleaded 95 RON and Diesel as of April 3, 2015; 2/ EU, Excise Duty Tables, January 2015; and 3/ EU, Excise Duty Tables (Tax receipts – Energy products and Electricity), July 2014; Eurostat; and IMF staff estimates.

17. **Excise rates on tobacco products are also set at a relatively low level, with a similarly positive demand effect**. For these products too, retail prices in Luxembourg tend to be generally lower than in neighboring countries. According to rough estimates by the Ministry of Finance, Luxembourg residents contribute about 20–25 percent of the combined excise and VAT revenues on all tobacco products combined, with the balance paid by nonresidents. Excises on tobacco net

Luxembourg some 1.2 percent of GDP annually, more than double the comparable levels in the three neighboring countries (Table 6).

Table 6. Tobacco Excise Revenues in Luxembourg and Neighboring Countries, 2013

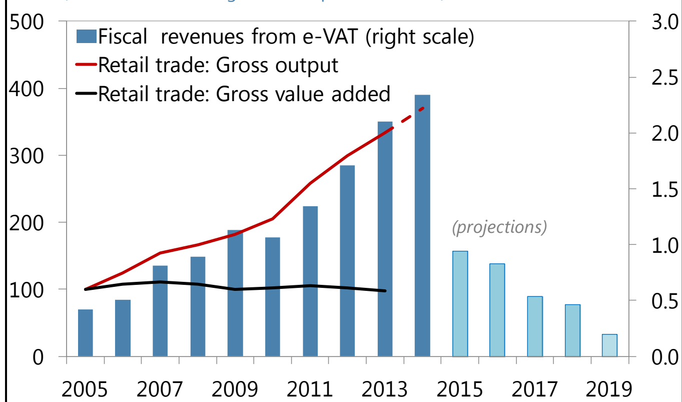
	Excise revenues (€ billion) 1/				Total (percent of GDP)	Nominal GDP (€ bn.)
	Cigarettes	Cigars	Other	Total		
Luxembourg	0.4	0.0	0.1	0.5	1.2	45.3
Belgium	1.7	0.0	0.4	2.1	0.5	395.3
France	9.8	0.2	1.2	11.1	0.5	2,113.7
Germany	12.2	0.1	1.8	14.1	0.5	2,809.5

Sources: 1/ EU, Excise Duty Tables (Tax receipts – Manufactured Tobacco) , July 2014; Eurostat; and IMF staff estimates.

18. **In addition, VAT collected on electronic commerce contributed increasingly to Luxembourg's VAT receipts in the decade up to 2014**. Under streamlined EU rules governing e-VAT as implemented in 2003, e-commerce within the EU was taxed at origin rather than at destination for firms established in the EU (whereas firms selling from outside the EU had to determine the final destination to apply the correct VAT rate). These rules incentivized major non EU firms such as Amazon and Apple's iTunes to establish in the Luxembourg, which offered the lowest VAT rate in the EU. Luxembourg's revenues from e-VAT thus increased from about 0.4 percent of GDP in 2005 to an estimated 2.3 percent of GDP in 2014 (Figure 8).

Figure 8. Retail Trade and e-VAT, 2005–19

(Index, 2005 = 100; right scale in percent of GDP)



Sources: STATEC; Ministry of Finance; BCL; and IMF staff estimates.

19. **New EU rules, however, will sharply reduce e-VAT receipts that may be retained by Luxembourg going forward**. Under EU Directive 2008/8/EC, e-VAT shall accrue to the country of domicile of the purchaser not the seller. Under the legislated transitional provisions, Luxembourg's share of the affected e-VAT revenue would fall to 30 percent in 2015–16, 15 percent in 2017–18, and zero thereafter. Thus e-VAT revenue retained by Luxembourg is projected to fall by more than half, to about 1 percent of GDP in 2015, and to halve again by 2018. Exact amounts, however, will depend on the behavioral responses of affected firms, some of which could relocate out of Luxembourg.

F. Conclusion

20. **In summary, as in other small open economies, a material share of Luxembourg's tax base could prove susceptible to changes in EU, OECD, and U.S. tax practices or standards** (Table 7). The remaining dwindling sums of retained e-VAT will depend on firms' behavioral responses to new EU rules for cross border e-commerce. Over three-quarters of excise and VAT revenues on fuel and tobacco products are generated by nonresident demand. The financial sector generates some 18 percent of total revenues (counting ancillary industries' contributions and employees' PIT). Within these, revenues from the subscription tax on funds' assets under management are importantly a function of market valuations. Separately, MNCs' decisions to route corporate treasury operations through Luxembourg likely lift CIT receipts, although here effects are especially difficult to quantify.

Table 7. Selected Luxembourg Fiscal Revenue Sources, 2014

(Estimates for 2014 unless otherwise indicated)

	Percent of GDP	Percent of consolidated budget revenues
Financial sector	8	18
Excises and VAT on fuel and tobacco	4	9
Retained e-VAT (2015 projection)	1	2
Total	13	29
Memorandum items:		
Corporate income tax	5	11
Subscription tax	1½	3½

Sources: Luxembourg authorities; and IMF staff estimates.

21. **The precise triggers, magnitudes, and time horizons of challenges vary by type of revenue, are difficult to predict, and reflect many factors outside of Luxembourg's control**. This situation is not unique to Luxembourg, in many respects being common to other small open city state economies. Such economies' macroeconomic prospects and revenue trajectories tend to be especially tightly linked to the policies of larger neighbors as well as developments more broadly. Nonetheless, it is important that the tax challenge that could now face Luxembourg is monitored, understood, and quantified as details evolve. Here, Luxembourg's tax policy review scheduled to begin this year provides a timely opportunity to assess options.

22. **To address potential challenges to Luxembourg's revenue base, the tax policy review should explore selective rate increases and base broadening measures**:

- *Review options to marginally increase the tax take from the burgeoning investment fund industry*. The doubling of assets under management over 2005–14—with a half trillion euro increase in the last seven months alone—has not resulted in a proportional increase in revenues from this sector. Yet, with ECB monetary policy settings likely to remain exceptionally accommodative for an extended period, balanced by expectations of U.S. rate hikes, it is possible that search for yield dynamics will continue to drive strong asset growth going forward. With assets under management already at €3½ trillion, efforts to modestly increase collections from the sector would be wholly consistent with "following the money." Options would need to preserve Luxembourg's appeal internationally, with due consideration for tax arrangements in major competing investment fund jurisdictions.

- *Increase taxes on real estate and motor vehicles, where rates are currently set at relatively low levels.* Strikingly, the last round of comprehensive real property revaluations for tax purposes took place in 1941. While a large jump in official real estate values and attendant tax obligations on old properties may be politically challenging, ample scope exists for gradual upward adjustments. Regarding taxes on motor vehicles, there may be scope to increase rates, including through CO_2 levies, which could also reduce street congestion and pollution. Current low oil prices make the timing propitious for any such adjustments. In addition to positive revenue effects and relative ease of collection, these and other similar taxes offer the advantage of strong progressivity.

- *Revisit the scope and level of reduced VAT rates, which remain among the lowest in the EU even after the recent rate increase.* The super reduced 3 percent slab deserves particular attention, where any future revisions would build upon the reforms adopted in 2014 and effected on January 1, 2015, which moved real estate investments (other than primary residences) and the consumption of alcoholic beverages from the super reduced rate to the standard 17 percent VAT rate.

- *Review CIT rates and rationalize exemptions.* The objective should be a modernized system with competitive rates, a broad base, and simplicity with fewer exemptions. Detailed analysis is already underway in view of the envisaged tax reform. In particular, Luxembourg is adapting its tax legislation regarding IP, where the new tax treatment should narrow eligibility conditions for IP related exclusions. Other simplifications may also apply.

23. **Finally, Luxembourg's tax practices should seek to avoid encouraging unnecessary complexity in corporate ownership structures and intragroup financial contracts**. Demand for firm specific cross border rulings often reflects the lack of harmonization across national tax regimes, and there are benefits in providing certainty to firms. Recently, however, it has become apparent that some rulings could give rise to layers of holding companies transacting with each other in hybrid instruments, which in the financial sector can multiply challenges for regulators and supervisors. Therefore, even as information sharing increases, the procedures for issuing ATRs and APAs should seek to promote simplicity in group structures, especially in the financial sector.

References

Budget draft, 2015: "Projet de Plan Budgetaire du Grand-Duché de Luxembourg 2014-2015," - Luxembourg, le 15 octobre 2014.

Cours des comptes, 2014: "Avis sur le projet de loi 6720 concernant le budget des recettes et des dépenses de l'Etat pour l'exercice 2015 et le projet de loi 6721 relatif à la programmation financière pluriannuelle pour la période 2014 à 2018," - *Cours des comptes, Grand-Duché de Luxembourg,* 2014.

Deloitte, 2013: "Taxation and Investment in Luxembourg 2013: Reach, relevance and reliability."

Etude d'impact, 2012: "Etude d'impact de l'industrie financière sur l'économie luxembourgeoise," - *Luxembourg for Finance,* January 2012.

Evers, Lisa, Helen Miller, Christoph Spengel, 2014: "Intellectual Property Box Regimes: Effective Tax Rates and Tax Policy Considerations," – *International Tax and Public Finance*, Springer, 2014.

Elvinger, Jacques and Xavier Le Sourne, 2013: "Luxembourg," - *Elvinger, Hoss and Prussen*, 2013.

Gaston-Braud, Olivier, Elisabeth Adam, Martina Bertha, 2014: "Soparfi: The Luxembourg Holding and Finance Company," - *Elvinger, Hoss and Prussen*, September 2014.

Haldane, Andrew, 2010: "What is the contribution of the financial sector: Miracle or mirage?" – Chapter 2 in *Adair Turner and others, The Future of Finance: The LSE Report*, – London School of Economics and Political Science, London, 2010.

KPMG, 2012: "Corporate Headquarters in Luxembourg."

KPMG, 2015: "Luxembourg tax treaty network."

OECD, 2015: "OECD Economic Surveys: Luxembourg 2015," – *OECD Publishing*, Paris, 2015.

U.S. draft budget for FY 2016: "Budget of the U.S. Government, FY 2016," – *U.S. Government Publishing Office*.

Zucman, Gabriel, 2014: "Taxing across Borders: Tracking Personal Wealth and Corporate Profits," - *Journal of Economic Perspectives*—Volume 28, Number 4—Fall 2014—Pages 121–148.

LUXEMBOURG AND EU HOLDING COMPANY CHALLENGES[1]

Luxembourg has long been an important home and host jurisdiction for nonbank holding companies, some of which control banks. Under EU rules, nonbank firms that control banks—bank holding companies—are not regulated entities, unlike in certain other jurisdictions, notably the United States. Yet with the Single Supervisory Mechanism much of the EU now benefits from a central supervisory node. This and the cascading failures of Espírito Santo companies, including banks, last year make the timing apt for a reexamination of Luxembourg and EU oversight arrangements for groups that include banks. Luxembourg intends to exercise its limited national discretion to tighten some rules domestically, while also advocating for improvements at the EU level. Both steps are fully consistent with strengthening its reputation as a sophisticated, conservatively regulated, and therefore attractive jurisdiction for international financial business.

A. Introduction

1. **Luxembourg's appeal as a center for European finance is tied to its reputation for capital account openness and prudential conservatism**. Its economic model, emphasizing also fiscal stability with low taxes and responsiveness to investor needs, is a magnet for international financial business and has generated growth and prosperity. Cross border intragroup banking activity is central to this model, where the tradition of openness is itself manifested in well articulated policies for exempting banks' claims on their affiliates from large exposure limits, and large resulting flows. Prudential conservatism, in turn, is evidenced by sizable risk buffers, which support the resilience of banks within Luxembourg, even as extensive cross border group relationships ensure that risks are distributed internationally. In such a system, reputation is critical.

2. **The Espírito Santo failures, triggered by financial and operational weaknesses at the Luxembourg based group holding companies, the group's main bank, and other group entities, are a call to action**. Although a financial non event in Luxembourg, impacts were felt in Angola, Brazil, Cabo Verde, Cayman Islands, Italy, Macao, Mozambique, Panama, Switzerland, the United States, and—not least—Portugal, where the flagship concern, Banco Espírito Santo (BES), was the third largest bank and had to be placed in resolution. Yet under EU and national law none of the three Luxembourg holding companies that defaulted was a directly regulated entity, itself required to hold capital or other prudential buffers, neither by Luxembourg, nor by Portugal, nor effectively by any other jurisdiction. The case thus casts a harsh glare on cross border regulatory arrangements in the EU, and should result in concrete steps to improve them.

3. **This chapter asks what Luxembourg can do to strengthen its regulatory and supervisory arrangements for groups with banks, and what it should advocate for at EU level**.

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To do so in an informed manner, it looks to longstanding U.S. arrangements in this area, comparing and contrasting them with those in the EU. Within groups, its focus is on arrangements to support the safety and soundness of banks (credit institutions or federally insured depository institutions in EU or U.S. legal parlance, respectively), given their maturity transformation and leverage and the attendant macrofinancial stability issues. The chapter investigates the reach and depth of regulatory and supervisory powers. It does not focus on their application, nor does it attempt any post mortem (much less allocate responsibility) for the Espírito Santo events, where Luxembourg was not the competent authority under EU arrangements. Nonetheless, a menu of reform options is offered with a view to reducing the likelihood of similar failures in the future. This begins with various potential actions at the EU level, and ends with a few steps Luxembourg could take alone, it being understood that EU wide action is likely to be more efficient and effective.

B. Some General Issues in Consolidated Banking Oversight

4. **Consolidated regulation and supervision limit risks by taking an encompassing view of the group as a whole, including its intragroup financial, reputational, and operational ties**. Absent such oversight, a bank could use a waterfall of bank subsidiaries to circumvent capital rules; each subsidiary would count the equity holding of its parent as capital, while the parent would count its equity holding in the subsidiary as an asset (BCBS, 1978). Consolidated accounts net out intragroup claims, revealing the true extent of leverage. Equally, with group entities also bound together by a shared franchise and, often, shared staff and systems, reputational and operational links can be critical. Consolidated capital rules, imposed alongside solo requirements, seek to ensure buffers against group related risks. Finally, consolidated supervision, armed with data on intragroup exposures and their characteristics as well as powers to examine nonbank entities within the group, seeks to understand the overall operations of the group and thereby better assess risks to banks within it. In all these areas, properly determining the perimeter of consolidation is central.

5. **Seeking this broader view places large demands on official resources, where group structures that impede effective oversight can be called into question**. Cross border groups can be especially complex, blurring lines of control and responsibility. Some groups may also include companies engaged in nonfinancial activities, which bank supervisors have less capability to assess and which do not map to traditional prudential norms designed around banking. Espírito Santo exemplified these challenges, with controlling interests in BES flowing through multiple holding companies mixing banking and commerce in multiple jurisdictions. Such aspects can stretch prudential regulations and supervisory resources to the point where effective consolidated oversight is not feasible and the structure of the group comes into question. Relevant levers include rules governing shareholdings in banks and, in some jurisdictions, outright activity restrictions prescribing or proscribing what banks and their affiliates may or may not do, the application of which seeks to permit an unhindered view of risks and ensure that buffers are sufficient.

6. **It is important to distinguish between consolidated oversight of ultimate holding companies that are not banks, and oversight of banks based on consolidated accounts**. In the first case—the approach followed in the United States—the holding company itself is a regulated entity that must comply with regulatory capital and other prudential requirements, and supervisors

have extensive powers to require reports from and examine nonbank entities within the consolidation perimeter (in the spirit of BCBS, 2012, Core Principle 12); here, the owners of banks are required to be a source of strength to their bank subsidiaries. In the second case—the approach followed in the EU—the holding company is not a directly regulated entity and consolidated capital requirements apply only to one bank within the group, with consolidated accounts as an input; here, supervisory line of sight to the nonbank holding companies and affiliates is through the banks, and the more defensive emphasis is on limiting risks to the safety and soundness of banks in the group.

7. **There is a delicate balance between minimizing risks through consolidated oversight and not losing all benefits of the group structure**. Group structures can ameliorate asymmetric information problems in lending, with intragroup credit to affiliated banks or firms having lower informational and transactional costs, thus making it potentially more efficient than if such financing were provided by external sources (Saunders, 1994, and Vander Vennet, 2002). Similarly, exposures of a bank to its parents or affiliates may carry lower risk than those to unaffiliated counterparties, which in turn forms the rationale, in many jurisdictions, for exemptions from large exposure limits for such claims. Nonetheless, there is clearly also a risk of transactions on terms other than arm's length, and of other conflicts of interest, as might well have been the case in some of the intragroup and retail client borrowings of certain Espírito Santo companies.

C. Some Questions Raised by the Espírito Santo Case

8. **As noted, the Espírito Santo conglomerate mixed banking, other finance, and commerce, in many jurisdictions, with many intermediate holding companies** (Figure 1). Its lower layers included BES and BES's many subsidiary banks outside the EU. An intermediate layer integrated the group's banking, fund management, and insurance activities, within and outside the EU, under Luxembourg incorporated Espírito Santo Financial Group (ESFG). The layers above ESFG connected the group's financial and nonfinancial businesses, the latter in real estate, construction, infrastructure, healthcare, hotels, recreation, and travel, spread across the globe. These upper layers included Luxembourg incorporated holding companies Espírito Santo International (ESI) and Rioforte Investments, both of which would eventually default and file for bankruptcy, as would ESFG. At the top was the aptly named Espírito Santo Control, also registered in Luxembourg.

9. **BES was regulated and supervised on a solo basis as a bank, and on a consolidated basis as a subsidiary of ESFG**. Under EU law and by bilateral agreement with the Commission de Surveillance du Secteur Financier, the Luxembourg regulator, Banco de Portugal was the national competent authority responsible for conducting both levels of oversight, with consolidated accounts capturing ESFG and all its subsidiaries (Banco de Portugal, 2014a). In 2014, however, progressive dilution of ESFG's stake in BES resulted in its losing its controlling interest, triggering a narrowing of the consolidation perimeter to the level of BES and its subsidiaries (Banco de Portugal, 2014a). At no point did companies above ESFG in the group structure sit within the perimeter.

10. **In a vivid demonstration of intragroup financial, reputational, and operational links, Espírito Santo companies failed in a cascade** (Figure 2). ESI defaulted on its commercial paper on July 10, 2014, and within 25 days it, Rioforte, and ESFG had all filed for bankruptcy in Luxembourg

and BES had been intervened in Portugal. BES's failure ultimately came down to losses incurred in the group's nonfinancial arm (Banco de Portugal, 2014b). The bank was exposed to those losses in several ways: directly, through the loans it had extended to Rioforte and ESFG; indirectly, through the guarantees it had issued to segregated retail customers who in turn bought commercial paper issued by ESI; and reputationally, through the family name. After it emerged that ESI had misreported its financial standing, funding dried up for multiple group entities concurrently, with ESFG and BES suffering rating downgrades and ESFG (reportedly) facing a large margin call. Defaults followed swiftly, starting at ESI and ratcheting downward to Rioforte, then ESFG, leaving BES's capital significantly below the regulatory minimum (Banco de Portugal, 2014b).

11. **The Espírito Santo case thus raises a number of questions about regulatory and supervisory arrangements and banking group structures in the EU**. What features of the oversight framework permitted the buildup of BES's direct exposures to two nonbank holding companies even as a third holding company higher up in the ownership structure was concealing losses? What features permitted the guarantees on fund products bearing the franchise name and concentrated in holding company paper? Have arrangements for a subset of EU member states changed materially with the establishment of the Single Supervisory Mechanism (SSM)? To answer these and other questions, this paper surveys the applicable EU arrangements and how the SSM has affected them, later turning for comparison to similar arrangements in the United States.

D. EU Arrangements for Consolidated Banking Supervision

12. **The legal framework governing the oversight of banks in the EU centers on the Capital Requirements Regulation (CRR) and Capital Requirements Directive (CRD)**. More formally, these are Regulation 575/2013/EU and Directive 2013/36/EU (CRD4), respectively, both of which entered into force in July 2013. CRR lays down prudential rules intended to ensure the safety and soundness of individual banks as well as certain requirements for shareholders having direct or indirect qualifying holdings in banks. CRD, in turn, sets out provisions concerning the licensing and supervision of banking activity, *inter alia*. This arrangement, comprising a Regulation directly applicable across the EU and a Directive that must be transposed into national law, constitutes an innovation over the previous regime of Directives 2006/48/EC and 2006/49/EC with no EU Regulation, with the new construct helping to minimize differences in national treatments.

13. **Nonbank holding companies relevant for banking supervision fall into three categories**. Defined in law, these are: (i) the *financial* holding company, "a financial institution, the subsidiaries of which are exclusively or mainly institutions [strictly, banks or investment firms, hereinafter banks] or financial institutions, at least one of such subsidiaries being [a bank], and which is not a mixed-activity holding company"; (ii) the *mixed financial* holding company, "a parent undertaking other than a regulated entity which, together with its subsidiaries—at least one of which is a regulated entity which has its registered office in the [EU]—and other entities, constitutes a financial conglomerate"; and (iii) the *mixed-activity* holding company, "a parent undertaking other than a financial holding company or [a bank] or mixed financial holding company, the subsidiaries of which include at least one [bank]." With financial and mixed financial holding companies subject to the same supervisory regime, references hereinafter will be to the former, for simplicity.

14. **A holding company may control a bank through a majority shareholding, a shareholders' agreement, or the exercise of dominant influence**. The first two are objective criteria, with little room for supervisory judgment. In contrast, determinations on the third criterion, where there is no detailed guidance (in the principles-based tradition), entail a great deal of discretion. Thus, under the "dominant influence" test, there is a risk that supervisors may not always recognize the true influence of a nonbank company in the affairs of a bank, thus missing the parent–subsidiary relationship and stopping short of declaring the former to be a financial holding company or a mixed-activity holding company, as applicable.

15. **Under CRD, the consolidation perimeter extends to the ultimate parent financial holding company of a bank or ultimate parent bank**. In the Espírito Santo case, these were EFSG and BES, respectively, and the perimeter extended to ESFG. It was not completely clear to the authors at the time of writing whether Rioforte, ESI, and other firms above ESFG in the Espírito Santo group organizational structure were identified as having control over ESFG and, through it, over BES. In the event that they were, they would have been classified as mixed-activity holding companies by virtue of their nonfinancial holdings. Mixed-activity holding companies fall outside the consolidation perimeter. CRD does, however, require that national competent authorities be able to subject both financial and mixed-activity holding companies to reporting requirements, conduct investigations, and perform onsite inspections, as deemed necessary for the purposes of supervising banks. Such powers likely helped Banco de Portugal gain a more complete view of the risks facing BES.

16. **CRR applies certain prudential requirements on the basis of the consolidated situation of the group but, importantly, these apply to banks, not to their nonbank holding companies**. All entities within the perimeter of consolidation are regarded as if they effectively formed a single institution for the purposes of setting consolidated capital requirements. CRR (Article 11) is clear, however, that these requirements are only to be complied with at the level of the most significant bank within the group; in this critical regard, financial holding companies remain unregulated entities on a direct basis in the EU (as do mixed-activity holding companies, although here prudential requirements are moot as they remain outside the perimeter). BES was thus under an obligation to comply with rules on own funds as if all companies controlled by ESFG formed a single entity (before ESFG fell out of the consolidation perimeter), but ESFG was not.

17. **The "supervisability" of group structures is addressed also through governance tools, where the approach to nonfinancial affiliations remains relatively permissive**. CRR mandates that the legal structure of a banking group be deemed sound by the relevant national authority, where the structure must facilitate compliance with prudential requirements by banks and allow the exercise of effective supervision over banks. Separately, CRD requires that national authorities assess proposed acquisitions of qualifying holdings in a bank, evaluating each acquirer's suitability and financial standing so as to ensure sound and prudent management. There are no outright activity restrictions, with the legal existence of the mixed-activity holding company attesting to a certain permissiveness regarding the mixing of banking and commerce. Under CRR, a bank may have nonfinancial subsidiaries so long as its equity holding in such companies does not exceed 15 percent of its capital per company or 60 percent in the aggregate; national authorities may prohibit holdings in excess of these limits, or

apply a risk weight of 1,250 percent to the excess. Banks need not obtain prior approval to acquire equity stakes in nonfinancial firms.

18. **Banks are subject to large exposure limits, and transactions with their mixed-activity holding companies are subject to special scrutiny**. Under CRR, a bank's exposure to a client (or group of connected clients) may not exceed 25 percent of its capital, and every exposure equal to or greater than 10 percent of capital must be reported to the national authority responsible for solo supervision of the bank. Supervisors may exempt entities within the scope of consolidated supervision from such limits. Outside the perimeter, CRD affords special treatment to transactions with mixed-activity holding companies. This is in recognition of the risks their nonfinancial activities may pose to their bank subsidiaries. A bank must thus report on dealings with its parent mixed-activity holding companies and all subsidiaries of that company regardless of the nature and size of the transactions. National authorities, in turn, must exercise general supervision over these transactions, and must in particular require the bank to report any significant transaction.

19. **CRD generally entrusts the task of supervising banks on a consolidated basis to the national supervisor that licenses the bank, although exceptions apply**. Situations can arise where a single bank falls under two different national competent authorities for solo and consolidating oversight. For instance, in groups where a financial holding company owns two or more banks (or investment firms), the consolidating supervisor of the banks could be the national authority in the member state where the financial holding company is incorporated, or the national authority in the member state hosting the bank (or investment firm) with the largest balance sheet. As noted, in the case of BES and EFSG, the Luxembourg competent authority and Banco de Portugal agreed that the latter would be responsible for supervision on a consolidated basis.

20. **The establishment of the SSM eliminates the potential for multiple national supervisors of a single bank within the SSM area**. This is because, under the SSM Regulation, the ECB is now exclusively competent to carry out both solo and consolidated supervision of all banks in participating member states, and is the sole bank licensing authority. If a bank is deemed less significant, the ECB's responsibility is shared with the national competent authority, which shall perform supervisory tasks under the ECB's instruction. If it is not, direct ECB supervision applies, executed by a joint supervisory team comprising staff from national competent authorities and headed by an ECB staff member who may not be a national of the member state where the bank is incorporated. The ECB may decide at any time to directly supervise any less significant bank.

E. U.S. Arrangements for Bank Holding Company Oversight

21. **The regulation and supervision of banking groups in the United States has a dual focus on banks and their holding companies**. As in the EU, the traditional mandate of U.S. group wide supervision is the safety and soundness of banks, to limit but not eliminate the likelihood of bank failure. However, while in the EU only banks are regulated entities and their (nonbank) holding companies are supervised by force of certain supervisory powers over banks, in the United States both banks and (nonbank) bank holding companies (BHCs) must comply with prudential rules and submit to direct supervision and enforcement. U.S. BHCs thus carry a somewhat hybrid status,

indistinguishable in legal form from other financial or nonfinancial firms, not subject to chartering requirements mandatory for banks, yet regulated and supervised much like banks.

22. **A BHC in the United States is defined very broadly as any nonbank company that has control over a bank, whether directly or indirectly**. As in the EU, the concept of control is therefore crucial. Under U.S. law, a company is deemed to control a bank under three basic circumstances: (i) it directly or indirectly owns, controls, or has the power to vote 25 percent or more of any class of the bank's voting securities; (ii) it controls in any manner the election of a majority of the bank's directors; and (iii) it exercises directly or indirectly a controlling influence over the bank. In assessing the existence of a controlling influence, the Federal Reserve Board favors an expansive view. It has voiced concern, for example, that even a 10 percent holding of voting shares could confer controlling influence if combined with other factors (Carnell and others, 2009).

23. **Banks face strict activity restrictions, including on activities conducted through subsidiaries**. Under the National Bank Act of 1865, banks may carry out all activities expressly listed and activities incidental to the business of banking. Subsidiaries of a bank may engage in these activities as well as: (i) any financial activity other than securities underwriting and dealing in insurance or issuing annuities; (ii) activities the U.S. Treasury finds incidental to financial activities; and (iii) merchant banking, defined as making equity investments in nonfinancial companies, upon joint authorization from the U.S. Treasury and the Federal Reserve Board. Banks may only own minority interests in firms that engage in activities that are part of, or incidental to, the business of banking, provided the activities are "convenient or useful to the bank."

24. **Banks are also subject to strictures on their transactions with affiliates**. Such affiliates include parent companies, companies under common control, and subsidiaries of the bank. Under Sections 23A and 23B of the Federal Reserve Act of 1913, there are five main controls on dealings with affiliates: (i) the total transactions of a bank with any one affiliate cannot exceed 10 percent of the bank's capital; (ii) the total transactions of a bank with all affiliates combined cannot exceed 20 percent of the bank's capital; (iii) extensions of credit and guarantees must be fully secured with collateral; (iv) a bank cannot purchase "low quality" assets from an affiliate; and (v) a bank must deal with its affiliate at arm's length, as though it were undertaking a pure market transaction.

25. **The Federal Reserve Board has essentially the same authorities over BHCs as the federal banking agencies have over banks**. Prudential requirements and activity restrictions directly applicable to BHCs date back to the Bank Holding Company Act of 1956. The Federal Reserve Board, as sole regulator and supervisor of BHCs, imposes consolidated capital requirements at the level of the ultimate holding company, may monitor and examine it and all its subsidiaries, and can takes enforcement actions at multiple levels to address risks and infractions of laws and regulations. The Federal Reserve Board may also require a BHC to divest itself of subsidiaries or terminate activities that constitute a threat to a subsidiary bank. Like banks, mono- and multi-bank BHCs are permitted to engage only in banking or activities closely related to banking.

26. **U.S. oversight arrangements thus cover the full spectrum of banking affiliations and activities**. Focusing on individual banks as well as BHCs from both solo and consolidated

perspectives, U.S. group wide regulation and supervision extends to virtually all affiliates of a bank, the exception being functionally regulated nonbank affiliates such as security broker-dealers, where some "functional deference" applies. Direct oversight of banks is conducted by the three federal banking agencies (the Federal Reserve Board, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency) and 50 state banking regulators, while that of BHCs is the sole preserve of the Federal Reserve Board. This system creates overlaps and significant supervisory burden, yet also ensures dual scrutiny by separate agencies at both the bank and the BHC levels.

27. **Financial liberalization in the late 1990s limited some Federal Reserve Board powers, and eased activity restrictions**. The Gramm-Leach-Bliley Act of 1999 codified the concept of functional deference, under which the Federal Reserve Board cannot compel a functionally regulated subsidiary of a BHC (notably, a security broker-dealer or a commodity futures merchant under the Securities and Exchange Commission or the Commodity Futures Trading Commission, respectively) to provide reports without substantiating that the information is necessary to assess a material risk to the holding company or its banks. The Federal Reserve Board may not examine a functionally regulated entity unless it is engaged in activities that could pose a material risk to affiliated banks, nor take enforcement actions against such entities. The Gramm-Leach-Bliley Act also created a new type of BHC, the financial holding company, permitted to engage, directly or through subsidiaries, in activities that the Federal Reserve Board has determined to be financial in nature or incidental or complementary to a financial activity. A complementary activity may be pursued as long as it poses no substantial risk to the banks and to the financial system as a whole. To qualify as a financial holding company, a BHC must be deemed well capitalized and well managed, *inter alia*.

28. **The Dodd-Frank Act left the U.S. system of consolidated supervision substantially intact, yet broadened its mandate to include financial stability considerations**. Macroprudential considerations codified in U.S. law date back at least to the Gramm-Leach-Bliley Act, which, as noted above, widened the scope of permissible activities for BHCs but only if such activities did not threaten financial stability. The push toward an explicit macroprudential mandate for regulation and supervision advanced significantly with the passage of the Dodd-Frank Act of 2010, which introduced the possibility of placing systemically important nonbank financial institutions under Federal Reserve Board oversight. This effectively formalized the growing view that banks have no monopoly on risks to financial stability, especially when nonbanks engage in bank-like activities.

F. Some Policy Options for Luxembourg and the EU

29. **In the EU, oversight of groups that include banks is done on the basis of consolidated accounts, but without the full gamut of regulatory powers over holding companies**. In particular, there are no capital rules for holding companies, with consolidated capital requirements to be complied with at the level of the most significant bank within the group. As elaborated above, there have been some changes with the advent of the SSM, but most regulatory and supervisory powers as enshrined in EU legislation apply across the EU as a whole and, in so far as they address consolidated banking oversight, remain largely unchanged. Yet the SSM area now has, in the ECB, a central supervisory body analogous to a federal banking agency in the United States, responsible for

the solo and consolidated supervision of all banks. As the SSM develops its supervisory protocols, it could serve as a force for further legal changes in its areas of concern.

30. **One fundamental change could be to introduce direct regulation of ultimate holding companies of banks, requiring that they be sources of strength**. Bank supervision in the EU retains a defensive slant, focused on protecting banks within a group from risks arising from their nonbank parents and affiliates. Controls over the group's nonbank activities rely mainly on ensuring that the group structure does not impede the supervisability of banks within it, on assessments of shareholder suitability, and on Pillar II capital add-ons. All of these are indirect measures that may not address risks at source, but seek to bolster the capacity of banks to shoulder risks should they materialize. Alternatively, an approach closer to the U.S. Federal Reserve Board's "source of strength" doctrine could be considered, where holding companies are required to act as sources of financial and managerial strength to their subsidiary banks, conducting their operations in a safe and sound manner, subject to directly enforceable prudential norms (Regulation Y, 12 CFR Section 225.4).

31. **Another proposal could be to revisit the relatively permissive EU approach to the mixing of banking and commerce**. Capital and other prudential rules designed for banks do not map to nonfinancial business. In order to effectively apply such rules to holding companies, and because bank supervisors have limited capabilities to assess risks at companies engaged in nonfinancial activities, and because of potential conflicts of interest, steps may be warranted to increase the separation between banking and commerce. Indeed, the end goal might be full separation, with appropriate transitional arrangements that accept the necessity of grandfathering. To be clear, the focus would be on nonfinancial affiliations, not on securities underwriting, insurance, or other financial activities integral to the European universal banking model.

32. **The U.S. approach to activity restrictions could be worth further study**. Whereas in the EU nonbank subsidiaries of banks face no activity restrictions, in the United States such subsidiaries may only perform authorized financial activities. In addition, U.S. banks' minority equity stakes are limited to firms that engage only in activities that relate to banking, with the same restrictions applying to bank affiliates through rules applicable to BHCs. Even the more permissive regime for U.S. financial holding companies sets out activity restrictions, limiting these firms to financial activities or activities incidental or complementary to financial activities. To the extent some U.S. groups still avail of the grandfathered "unitary thrift exception" to mix banking and significant commercial business, the Federal Reserve Board may require that all financial activities be placed under a regulated intermediate holding company (Bhatia, 2011). In the EU, in contrast, there are no outright prohibitions on bank affiliations with nonfinancial firms. The Espírito Santo group could not have been constructed under U.S. rules.

33. **Luxembourg itself has limited options to act given harmonized EU rules**. Under national legislative discretion (EBA, 2013), Luxembourg could impose capital requirements on financial holding companies, effectively making them directly regulated entities, although level playing field considerations suggest this is best left to EU law. While most other broad issues in consolidated regulation and supervision are similarly best tackled at the SSM and EU levels, Luxembourg could be more muscular in ensuring that groups that include banks are structured in such a way as to enable

their effective supervision under the SSM, in consultation with the competent consolidating supervisor. In practice, this will require that an approach be followed embracing the maximum allowed rather than the minimum required intrusiveness with regard to nonbank companies that are affiliated with banks. Such an approach could also emphasize critical joint assessments of whether nonbank companies exert dominant influence on banks and thus should fall under the relevant EU and SSM rules and arrangements. Also within the scope of national discretion is the possibility to tighten rules governing the use of a bank's franchise name by nonbanks claiming no affiliation, to sever unwanted reputational links.

G. Conclusion

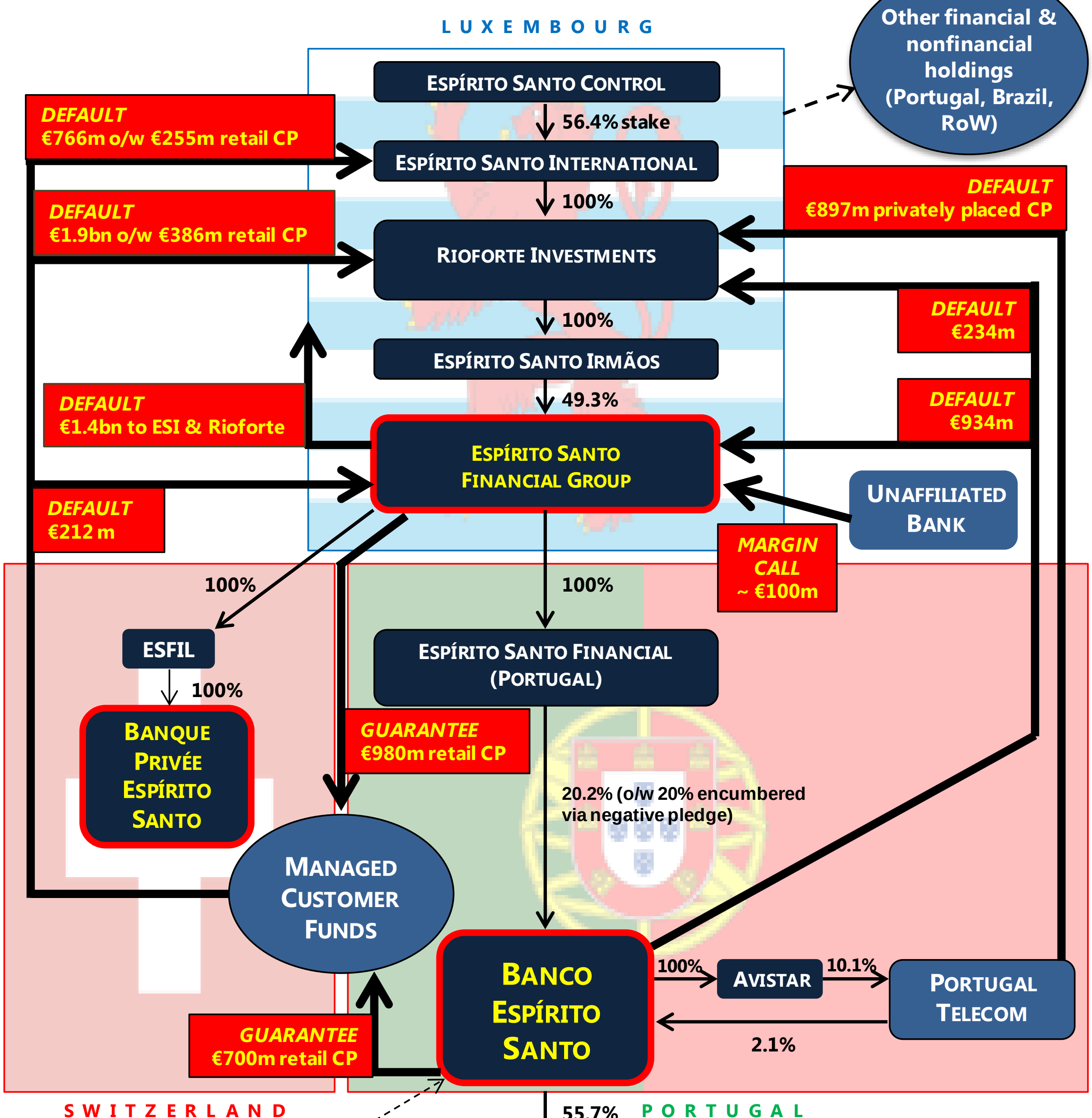
34. **Luxembourg has benefited from its strong reputation as a financial hub and its popularity as a jurisdiction for holding companies, but this reputation is not immutable**. According to staff calculations for 2013 from total company registrations at the European Business Register, there are approximately four residents per registered company in Luxembourg compared to about ten per company in Ireland and Malta and around 20 per company in France and Germany. As a legal designation in Luxembourg, holding companies or "*Soparfis*" have a history that can be traced back to the early twentieth century (Luxembourg for Finance, 2015). The high demand for registrations comes with risks for Luxembourg, however, including because the supervision of Luxembourg holding companies that own banks elsewhere can fall in the remit of other authorities.

35. **Even without major changes in consolidated oversight arrangements, there are modest yet attractive options available to Luxembourg and the EU to strengthen supervision**. Fundamentally, the argument against major changes for the EU is that, although U.S. and EU arrangements take different forms, they can be equivalent in application, particularly given vigorous assessments of group structures and bank shareholder suitability. This may indeed hold, but relies heavily on sound interpretation and discretion. As mentioned, Luxembourg lawmakers could restrict the use of a bank's franchise name by nonbank firms claiming no affiliation, also to avoid any impression that the latter could benefit from public backstops. Such a restriction could also be adopted at the EU level. Introducing regulations, including prudential requirements, directly applicable to holding companies would require deeper consideration.

36. **The possible reforms selectively mentioned above are but a starting point for an open discussion on what might work best in the EU context to improve holding company oversight**. The aim of any such reforms would not be to challenge the universal banking model prevalent in Europe (Vander Vennet, 2002), but rather to make the system more resilient by better identifying and addressing risks of affiliation at source while preserving banks' ability to generate value by efficiently allocating credit. The simplification of complex ownership structures involving banks would help preserve and strengthen financial resilience by supporting effective and comprehensive prudential oversight of bank holding companies.

Figure 1. Banco Espírito Santo, July 2014

Ownership Waterfall and Known Credit Links [1/]



Known Owners of BES (%)

ESF (Portugal)	20.2	Bradesco (Brazil)	3.9
Crédit Agricole	14.6	Desco LP	2.7
Silchester	4.7	Baupost	2.3
BlackRock	4.7	Goldman (clients)	2.3
Capital Research	4.2	Portugal Telecom	2.1

Known Key Financials, 2013 (€ million)

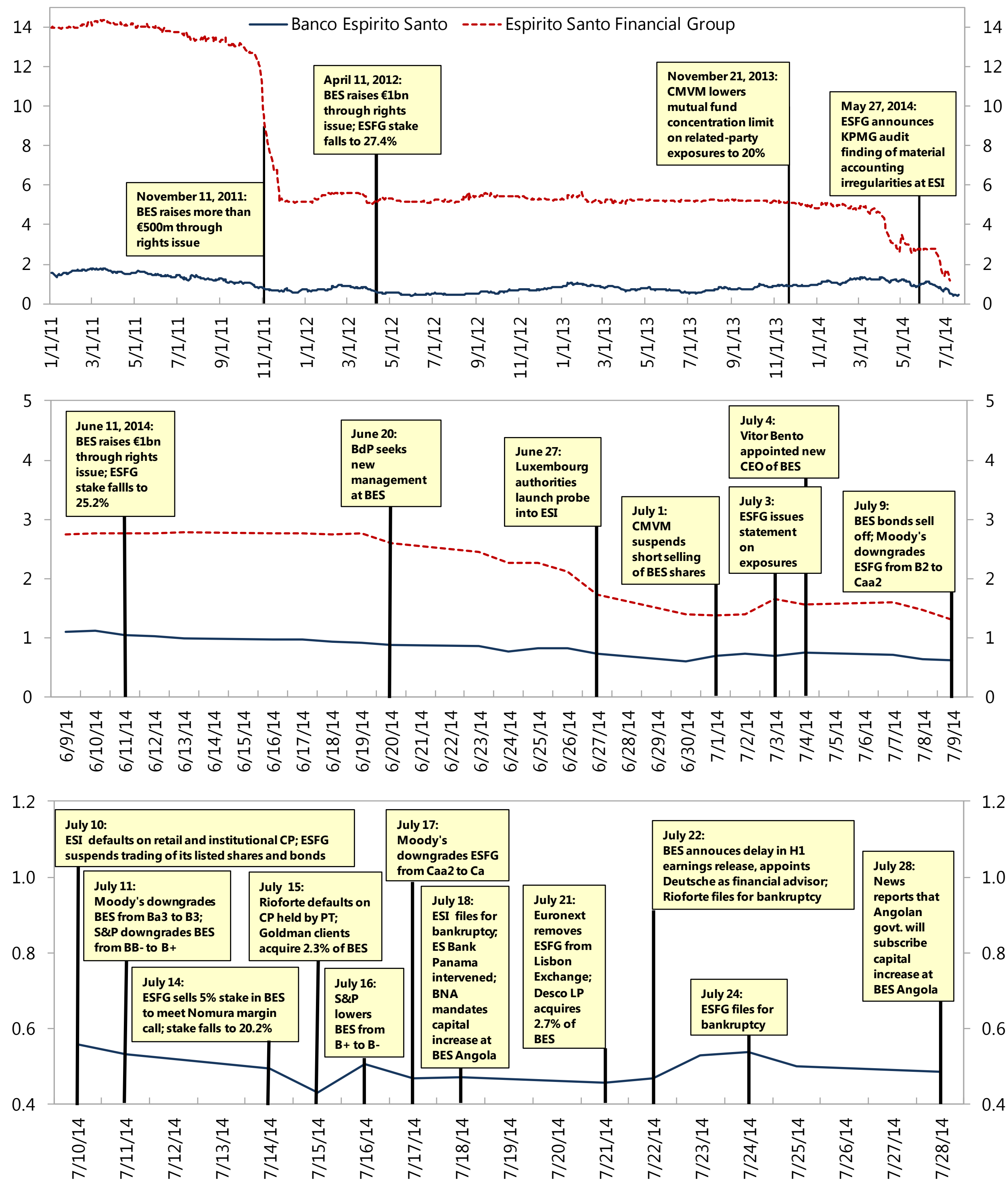
	Total assets	Total equity
Rioforte 1/	4,350	932
ESFG	84,850	6,711
BES	80,608	7,049
BES Angola	8,263	1,176

1/ Solo/unconsolidated.

Sources: Miscellaneous reports and IMF staff calculations.
1/ Simplified; omits various intermediate holding companies.

Figure 2. BES and ESFG Share Prices, January 2011 – July 2014

(Euros per share)



Sources: Miscellaneous analyst and press reports, Bloomberg, S&P, Moody's, and IMF staff calculations.

References

Banco de Portugal, 2014a, *Compilação de Esclarecimentos Prestados Relacionados com a Situação do Banco Espírito Santo*, accessed March 31, 2015.

______, 2014b, *Financial Stability Report*, November, accessed March 31, 2015.

Basel Committee on Banking Supervision, 1978, "Consolidation of banks' balance sheets: aggregation of risk-bearing assets as a method of supervising bank solvency," accessed April 7, 2015.

Basel Committee on Banking Supervision, 2012, "Core Principles for Effective Banking Supervision," September, accessed April 7, 2015.

Bhatia, Ashok Vir, 2011, "Consolidated Regulation and Supervision in the United States," IMF Working Paper WP/11/23, accessed April 23, 2015.

Carnell, Richard Scott, Jonathan R. Macey, and Geoffrey P. Miller, 2009, *The Law of Banking and Financial Institutions*, Wolters Kluwer: New York, New York.

European Banking Authority, 2013, "Own Funds, Question 2013_521," *Single Rulebook Q&A*, accessed April 24, 2015.

European Business Register, 2015, *European Interactive Map*, accessed April 7, 2015.

European Union, 2013a, "Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on Access to the Activity of Credit Institutions and the Prudential Supervision of Credit Institutions and Investment Firms, Amending Directive 2002/87/EC and Repealing Directives 2006/48/EC and 2006/49/EC," accessed April 7, 2015.

____, 2013b, "Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on Prudential Requirements for Credit Institutions and Investment Firms and Amending Regulation (EU) No 648/2012," accessed April 7, 2015.

Library of Congress, 1865, "National Bank Act of 1865."

______, 1913, "Federal Reserve Act of 1913."

______, 1956, "Bank Holding Company Act of 1956."

______, 1999, "Gram-Leach-Bliley Act of 1999," S. 900.ENR, Enrolled Bill, November 12.

Luxembourg for Finance, 2015, "SOPARFI," accessed April 7, 2015.

Saunders, Anthony, 1994, "Banking and commerce: An overview of the public policy issues," *Journal of Banking and Finance*, v. 18, pp. 231-254, accessed April 7, 2015

Vander Vennet, Rudi, 2002, "Cost and Profit Efficiency of Financial Conglomerates and Universal Banks in Europe," *Journal of Money, Credit, and Banking*, v. 34, n. 1, February, pp. 254-282, accessed April 7, 2015.