

Privatizations

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Background

- Privatizations: constitute a central requirement in Greece's bailouts
(The Economist (2011), Poggioli (2013))
 - in response Greek government formed HRADF–(**hellenic republic asset development fund**) for its goals see Hellenic Republic Asset Development Fund (2013)
 - early goal €50 bil by 2019–goal repeatedly revisited
 - current goal: €11.1 bil by 2016: €25bn by 2020; €50 bil (?) long run
 - since first bailout May 2010 GR has sold assets for €3.8 bil received €2.6 bil

What is for sale? (source HRADF)

Source [Hellenic Republic Assets Development Fund: Putting the Greek](#)

...

www.hradf.com/

Portfolio

LAND DEVELOPMENT

- Hellinikon
- International Broadcasting Center
- Kassiopi, Corfu
- Afantou, Rhodes
- Astir Vouliagmenis
- Sale & Repo 28 Buildings
 - Ministry Of Culture
 - Secretariat General of Information Systems (GSIS)
 - Hellenic Police Forensic Science Division
 - Hellenic Statistical Authority (ELSTAT)
 - Secreteriat General of Mass Media
 - Police Headquarters, Thessaloniki
 - Immigration Attica
 - Serres Police Headquarters
 - Tax Authority Xanthi (A&B) and Xanthi Chemical Laboratory
 - Athens A' Tax Office
 - 'IZ' Tax Office
 - Korinthos B' Tax Office
 - Chalkida B' Tax Office
 - Tax Authority, Stavroupoli

What is for sale? (source HRADF)

Tax Authority, Alexandroupoli
Tax authority Agioi Anargiroi
Pallini Tax Office
ATHENS 'IO' Tax Office
Glyfada Tax Office
Cholargos Tax Office
Kifisia Tax Office
Ministry of Internal Affairs Main Building
Athens Police Headquarters
Ministry of Justice
Ministry Of Health
General Chemical State Laboratory of Greece
Ministry of Education
Ministry Of Culture (Bouboulinas)
Real Estate Properties Abroad
Camping & Xenia Paliouri
Thermal Springs
Ermioni
Xenia Hotels
St. Ioannis - Sithonia
Voras Cluster
Motorway Supporting Areas (rolling ahead)
Motorway Supporting Areas (in progress)

What is for sale? (source HRADF)

INFRASTRUCTURE

- Hellenic Motorways
- "Egnatia Odos" Motorway
- Thessaloniki Water Supply and Sewerage Company
- Athens Water Supply and Sewerage Company
- Public Power Corporation
- Small Ports and Marinas
- Regional Airports
- South Kavala Natural Gas Storage
- OLP, OLTH, 10 Regional Ports
- TRAINOSE
- Athens International Airport
- Digital Dividend

CORPORATE

- State Lotteries License
- Public Gas Corporation
- Hellenic Horserace Betting Organisation
- Hellenic Football Prognostics Organisation
- Hellenic Petroleum
- LARCO
- Hellenic Post
- Hellenic Defense Systems
- Mont Parnes Casino
- Hellenic Vehicle Industry
- Hellenic Football Prognostic Organisation VLT Licences

Outcomes so far (source HRADF)

program proceeds

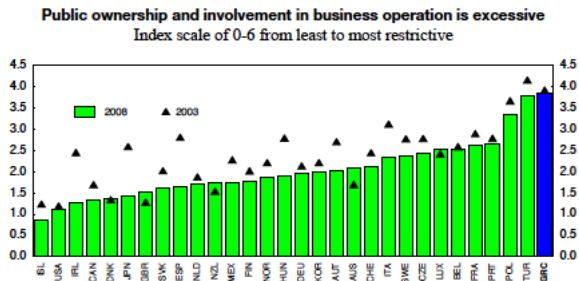
Total transaction value of completed privatisations is € 3,8 bil. while proceeds received so far amount to € 2,6 bil

<i>in € mil.</i>	Project	Total Proceeds	Proceeds Received
2011-2012			
1	OTE 10% Put Option	392	392
2	OPAP VLT's License	560	560
3	OPAP Extension of License	375	375
4	Mobile Telephony Licenses	381	317
5	2 Airbus	16	16
2013			
6	International Broadcasting Center (IBC)	81	81
7	State Lotteries	770	190
8	Real Estate Properties Abroad	41	27
9	OPAP Sale of 33% of Shares	652	622
10	Hellenic Gas Transmission System Operator (DESFA)	188	0
11	Sale and Leaseback of 28 buildings	261	0
12	Other Assets (Shares, real estate, etc)	95	37
Total		3.812	2.617

Privatizations pivotal for future prosperity

- a well-designed and executed privatization program can
 - ① **generate funds**
 - ② **function as a vehicle towards growth and prosperity**
 - example: Chile (see the comprehensive study of Gutierrez et al. (2003))
- a poorly designed and executed process may
 - ① **unjustifiably enrich few well-connected individuals** and create “oligarchs”
 - examples: Russia (Roland (2008)), Carlos Slim in Mexico
 - ② **inhibit growth** throughout high prices of essential services (telecommunications, electricity etc)
 - example: assigning monopoly rights for telecommunications to Carlos Slim in Mexico not only created one of the richest men in the world, but, more importantly, the high prices that prevailed post-privatization have inhibited Mexico's growth (Acemoglu and Robinson (2012))
 - ③ **bring production to a total standstill**
 - example: privatizations of Skaramgkas Shipyards

Greece's public sector excessive



Source: OECD (2010), Product Market Regulation database, <http://www.oecd.org/eco/state>.

Greece's prosperity depends largely on privatizations

Why?

- public sector excessive
- inefficient, cost millions to taxpayers, example TRAINOSE
- country is too indebted to take new loans to fund investments that bring growth
- private capital, ideas and knowhow thus essential

BUT...process must be designed and carried out with great care!

Goals

Offer insights and practical advice about Greece's privatization program to practitioners and policy-makers based on state-of-the-art academic knowledge and grounded to reality. Answer the following:

- Which are the main challenges of privatizing during a fiscal crisis?
- Which are the main advantages of privatizing during a crisis?
- What is the best way to privatize during a crisis? In particular,
 - How can we maximize the value of the assets for sale during difficult circumstances?
 - How can we increase the number of bidders for each sale and make them bid a lot?
- Which challenges are idiosyncratic to Greece's privatization program?
- Which advantages are idiosyncratic to Greece's privatization program?

Topic complex and task humbling...

Objectives of Privatizations

In order to speak about good privatization design, and more fundamentally, about why privatizations are desirable, one has to specify the objectives:

- ① reduce budget deficits and debt
- ② attract investment
- ③ improve productive performance
- ④ introduce competition into the hitherto monopolistic sectors of the economy
- ⑤ develop capital markets
- ⑥ reduce the state's involvement in the production process

But Why Privatize?

- Aforementioned goals can be achieved by other means... incentives, taxes
- Ultimately, whether privatizations are a blessing or a curse is an empirical question.
- summary of main findings:
 - 1 Impact on corporate productivity and performance: Megginson and Netter (2001) almost *unanimous* support that privatization increases output, efficiency, profitability and capital investment. Most studies underscore the role of competition in enhancing quality, efficiency and low prices.
 - 2 Impact on capital market development: Privatizations have had a significant impact on the development of capital markets. Boutchkova and Megginson (2000) find that large public offerings of privatised companies are associated with rapid growth of market capitalisation as a proportion of GDP.

But Why Privatize?

- findings continued

- 3 Impact on capital market development: significant: large public offerings of privatised companies are associated with rapid growth of market capitalisation as a proportion of GDP (Boutchkova and Megginson (2000), Sheshinski and Calva (1999))
- 4 Employment: ambiguous effects that vary greatly by sector (Megginson and Netter (2001), Mahoobi (2003)).
- 5 Social Justice: Birdsall and Nellis (2002) ambiguous: "privatisation appears to have worsened the distribution of assets and income at least in the short run– this has been observed more in transition economies than in Latin America."
- 6 Fiscal objectives: Barnett (2000) finds that privatisation proceeds tend to be transferred to the budget and saved, and that privatizations seem to have a positive link to improvement in the macro environment. National Economic Research Associates (NERA) in 1996 examined 31 privatised infrastructure companies and found that the revenues [...] contributed to government finances.

Other Issues and Findings

- how to privatize? (auction, IPO, negotiation, book-building...)
- what is the effect of identity of acquirers (foreign versus domestic, strategic etc) Frydman et al. (1999)
- sell the entire asset or a fraction? most works say sell in one piece but Perotti (1995) offers a good argument why not
- what about timing? (all assets at once, sequentially, before or after reforms...)

findings mixed...it depends

- the comparative study by Brown et al. (2006) of privatizations in Hungary, Romania, Russia and Ukraine eye-opening..

Ingredients of success and failures

- Successes

- Transparent process
- Good Design of process
- Commitment to reforms
- Thoughtful post-sale regulatory framework

- Disasters

- Lack of transparency, corruption, favouritism (Russia and Mexico)
- Corrupt "implementation" of the rules (Latin America, Former Soviet Union)
- Lack to account for post-sale excessive market power (California Electricity, Bogota Water....)

Challenges of the Greek Privatization Program

- **Weak macroeconomic conditions**
 - global budgetary problems
 - domestic political uncertainty
 - till recently currency uncertainty
 - devalued stock market
 - real estate market collapse (in some areas) caused by recession and erratic taxation

Challenges of the Greek Privatization Program

- **Lack of credibility**

- reputation takes time to build
- recent re-nationalizations by Argentina and other countries might raise concerns

- **Rent-seeking culture**

- **Some SOE's for sale natural monopolies**

- imperative to design appropriate regulatory framework
- electricity especially tricky (California), water (Bolivia and other south american countries)

- **environmental issues: natural beauty is Greece's most unique asset**

- balance extremely delicate especially when unique coastal areas for sale

Advantages of Greek Privatization Program

- **Potential efficiency gains enormous**
 - very weak performance of SOE - **Piraeus port concession to Costco improved performance by almost 50% in few months!**
 - high levels of politicization
 - lack of professional management and knowhow
 - poor quality of service
- **Privatization is accompanied by structural reforms**
 - tax code, labor market
 - the eyes of the world are on Greece (free publicity for the assets for sale)
- **There is a long list of lessons we can draw from past sales.....**
- **Country desperately needs investments which will bring jobs**

How to privatize?

- sell entire firm or break into pieces?
 - selling in one piece might be better for revenue, but excessive post-sale market power may hurt consumers
- lease? concession?
 - good options during a crisis where assets are devalued
- do an IPO?
 - might not be best if stock market weak
- if selling, how?
 - which procedures maximize profits? auctions? negotiations?
 - when is one better than the other?
 - how about efficiency? post-sale market structure?

Auction Design 1/3

- Assume asset value for buyer i , $v_i(T)$, T vector of signals (can be correlated), risk neutrality, number of buyers exogenous and fixed.
 - **revenue**: auctions ALWAYS better than negotiations Bulow and Klemperer (1996)
 - expected increase profits from extra bidder larger than reserve price and negotiating power...
 - **efficiency**: standard auctions without reserve prices are efficient—mild assumptions
- Assume entry is **costly**
 - Which one is better auction or sequential search? Bulow and Klemperer (2009)
 - **seq search** more efficient, but profits are lower because pre-emptive bids discourage entry
 - **action** is more conducive to entry, always generates higher revenue but maybe inefficient

Auction Design 2/3: Investment & Uncertain Cash Flows

- Asset requires investment X , generates ex-post verifiable cash flow for buyer i , Z_i , expectation private info z_i , risk neutrality, number of buyers exogenous and fixed.
 - auctions with **contingent** payments (equity, debt, call options, royalties etc) always generate **more revenue than auctions with a flat payment**, DeMarzo et al. (2005), Skrzypacz (2013)
 - caveats
 - adverse selection when X is not constant
 - moral hazard (also selling incentive contracts)
 - seller privately informed and common values, security design

Auction Design 3/3: Other Issues

- Is it better to sell the entire firm or a fraction?
- What kind of auction to use? Open, sealed bid? Reserve prices, entry fees? Scoring auctions....
- If auctioning natural monopolies sell as one or break into pieces
 - Depend on government goals (efficiency versus revenue)
- Post-sale regulation and its impact on sale price
- When is leasing preferred to selling?

Recipe: How to raise most money from a sale:

1. Maximize company value—value of SOE is **endogenous**

- Potential acquirers' due diligence accesses value of assets, future profitability, costs of firing, litigation costs etc.
- To increase price
 - ① reform tax codes, labor laws and signal **commitment** to the reforms
 - ② sell when macroeconomic uncertainty is low—if not possible lease (good for real estate)
 - ③ eliminate regulatory uncertainty
 - ④ maximize commitment through legal status of sale

Recipe: How to raise most money from a sale:

2. Attract many potential buyers and use a well-designed AUCTION

- advertise sale
- clear timeline
- facilitate due diligence by offering valuations, forecasts etc

3. Strategize

- Exploit market rivalries (firms may be willing to pay more to prevent their competitor from acquiring the asset)
- Geopolitical circumstances

Accountability: Background

- Clear from HRADF organisation, views and statements of purpose that the Fund recognises the importance of transparency, competition and accountability
- long of list of approvers and external evaluators is important in safeguarding the integrity of the process
- leaders of HRADF have legal immunity (which is probably useful as otherwise no serious person would have been willing to the risk of a false accusation)
- Council of Experts, the Court of Auditors, the Hellenic Parliament and the EU have to approve sales
- recent legislation deprives third parties of the right to file injunctions against positive decisions by the State Audit Council

Accountability: Proposed reforms

- Make mandatory for political parties and politicians to fully disclose their financing sources and business involvements.
- Mandatory disclosure of all potential conflicts of interests of all parties, authorities in the privatisation process (Investment bankers, Accounting firms, Lawyers).
- Close monitoring of the entire process by the outside observes appointed by the EU.
 - Greece is a small country and the circle of politicians, media and business people is small. Independent observes familiar with the Greek reality should be checking all steps of the process.

Transparency: Proposed reforms

Even though a lot of information is available on HRADF's site more can be done:

- Post more details of the assets-future receivables, debts, technical characteristics etc.
- Describe precisely the auction rules and the timing of the sale
- Describe in depth the criteria used to qualify bidders—this is key, since if there is opaqueness here, it may artificially appear that there are not many interested buyers and this may drive down the price.
- What is disclosed about bidders willingness to pay—their indications of interest—should be thoughtfully designed. So far HRADF announces them.

Auction procedure: Proposed reforms

- Clear Auction Procedure: Assets are assigned to the highest bidder, but what are the exact rules?
- timing
- reserve price
 - For example a **higher reserve price** might have been helpful in the sales of State Lotteries and in OPAP's sale, as well as for the case on the real estate assets sold on <https://www.e-publicrealestate.gr/>—sale prices at, or close to the reserve price suggest that there is little competition.
 - For the case of state lotteries HRADF writes: *The Hellenic Lotteries was sold for €190 mil. The value is estimated to be €1.5bn over a 12-year concession period.*
- clear payments contingent on future proceeds or future levels of stock price

Other reforms/suggestions

- **More publicity:** How many people interested in buying a house or land in Greece know the auction site
<https://www.e-publicrealestate.gr/>? This website should be prominently advertised.
- **More details:** assets for sale should be better described—for one—more pictures would be great
- The format should be the one professional intermediaries—real estate agents use
- In addition to the e-auction site, list properties on major international real estate agents in Europe, America, Asia etc.
- For companies already in the stock market—e.g. OPAP—use a **secondary market offering**. Make Payments **contingent on the asset's future performance indexed on stock price or gross revenues**

Other reforms/suggestions

OPAP | GF8.BE | Charts - Yahoo! Finance UK

25/10/2013 16:44



Risks of not improving the process

Critics may have legitimate ammunition....

OPAP was sold at a €6.19 per share. The day the sale closed the shares were being traded at €9.13 on the Athens Stock Exchange.

The day 33 per cent of its stock was sold off it was valued at nearly €1 billion. However, the Greece got only €652 million: €30 million of which will be paid over 10 years.

Consult Other Scientists

- for assets crucial for urban and environmental systems consult specialists
- e.g. the type of construction that takes place at "Hellinikon" possibly pivotal for the entire city dynamics
- beaches and natural treasures (mines, springs) are unique assets and transferring ownership to private hands should be accompanied with carefully designed rules about their development

Inform

France	9,000 municipalities	Concessions and leases	1853
England	Entire country	Full privatization	1989
United States	73 million people, including through PPPs		
14% of water revenues without PPPs	Investor-owned and 2,000 PPPs	1772 in Providence[
Armenia	Yerevan and others	Lease (1) and management contracts (2)	2000
Brazil	65 cities in 10 states	Concessions	1995
Chile	All urban areas	Full privatizations and concession (1)	1998
China	Shenzhen, Fuzhou, Lanzhou, Wuhu City and 23 others	Concessions (22), full privatizations (3) and management contracts (2)	2001
Spain	Barcelona and more than 1,000 other municipalities	Mixed-ownership companies and concessions	1867
Germany	Berlin	Mixed-ownership company (1)	1999
Mexico	Cancun, Saltillo and Aguascalientes	Mixed-ownership company (1) and concessions (2)	1993

Case study: water privatisation in Chile

- privatization was carried out in stages, beginning with 5 largest of 13 regional water companies serving more than 75% of users—because of the staging, it is possible to compare the performance of the privatized and public utilities at that time.
- comparison shows that from 1998 to 2001, private companies invested substantially more than public companies and—unlike the public companies—increased their labor productivity significantly. Tariffs increased for both types of companies, but more so for the privatized ones.
- "...in Chile, a social consensus emerged that has made the higher water rates acceptable given the improvements in service quality and the addition of new services such as wastewater treatment."
- Socialists maintained the basic institutional structure of the sector based on private service provision; means-targeted subsidies; and regulation by a public, autonomous regulator

Case study: water privatisation in Bolivia, Argentina, Albania

- in Bolivia privatization process did little increase access; increase in water prices following such measures was met by an approximate 2% increase in levels of poverty
- Following two popular uprisings against water privatization, the first in Cochabamba in April 2000 and the second in La Paz/El Alto in January 2005, the two concessions were terminated.
- But public water utility came under some criticism in 2008 due to water shortages, accounting errors, tariff increases and preparedness.

Case study: water privatisation in Bolivia, Argentina, Albania

- In Argentina water privatizations were associated with increased access to water, lower mortality, and higher prices
- In Albania water privatisation lead to better quality, increased access to water
- Recent denationalizations in Paris and in Berlin
- Berlin's case highlights the social and monetary costs of privatizing through an opaque process.

Key Lessons from the past

1. TRANSPARENCY

- there should be nothing private about privatizations

2. GOOD AUCTION DESIGN

- revenue from spectrum auctions greatly varied across different designs

3. POST-SALE MARKET DESIGN

- for competitive industries, encourage entry, competition
- for natural monopolies: design well-thought regulatory framework

4. ENSURE GOOD GOVERNANCE

- eliminate politicization
- make sure laws and rules are enforced uniformly and justice is swift

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