Guide to Financing
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Overview

Essentially 3 sources of finance exist with many (interrelated) instruments:

I. **Debt, Equity and Subsidies**
- ✓ A brief description

II. **Debt, Equity & Subsidies**
- ✓ A matrix

III. **Access to Capital**
- ✓ Debt & Equity; the balance sheet

IV. **Access to Capital and Risk**
- ✓ An absence of equity, precludes subsidy for the private sector

V. **Access to Capital and Demonstration Projects**
- ✓ A road map

Debt Equity & Subsidies

- **Debt**: Money raised on a debt market (bonds) or obtained from a bank (loans or mortgages). This requires the borrower to prove he or she has the resources to ‘service’ the debt i.e. make interest payments and be able to pay the debt back. It is available to corporate entities (e.g. bonds, loans, mortgages) or to private individuals (e.g. loans, mortgages). Conceivably available to Joint Technology Initiatives depending on legal structure. Not suitable for university R&D projects or independent developers who have little or no revenues, assets or no entity to guarantee the debt. Corporations and public bodies can raise debt to be provided to demonstration projects.

- **Equity**: Or risk capital or permanent capital, is money raised on a bourse or private market from venture capitalists or private individuals, and which is not returned to the providers. Available to established corporations (bourse) and is possible though difficult for start-up companies from VCs and private individuals. The provider of equity becomes an owner of the company with corresponding rights. Requires assets (physical & intellectual) that can be owned. Highly unlikely to be available source of finance to demonstration projects.

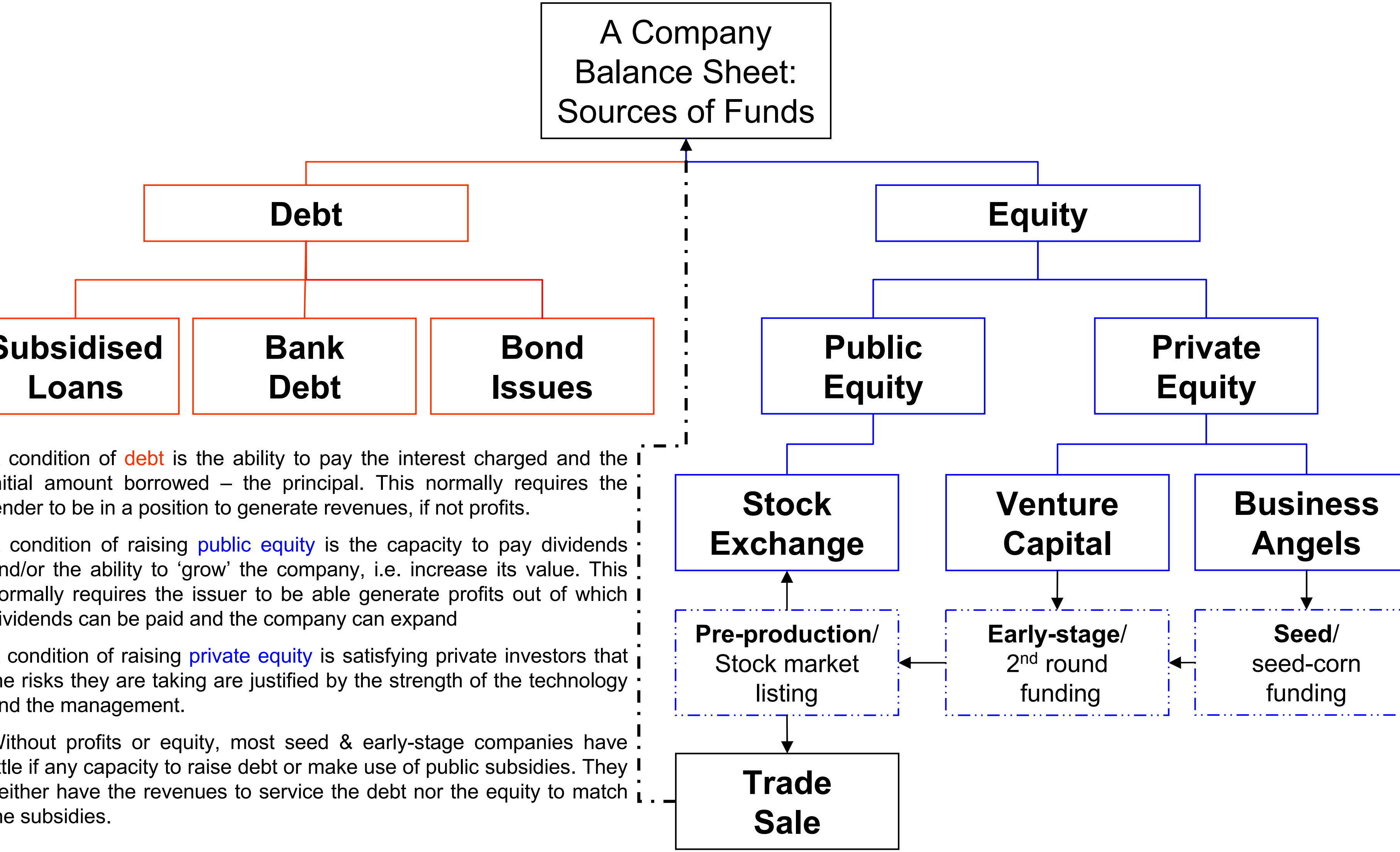
- **Subsidies 2**: R&D grants e.g. EU Framework grants are available to academe and corporations that have the capital reserves necessary to cover that part of the project’s cost not paid for by the grant. Whether such subsidies will be directly available to demonstration projects needs clarification.

- **Subsidies 1**: Tax breaks and capital grants are made available to corporations and are only of use where the corporation has taxable revenues is can use to claim the tax break and the capital resources to match the capital grant which normally a percentage of the specified capital cost incurred by the corporation. Only indirectly useful for demonstration projects in as far as corporate participants may have access to tax breaks and grants against which the project could be used. Will be different across the EU depending on local tax regimes. QQ

A Matrix of Debt, Equity & Subsidies

	Debt		Equity		Subsidies	
Type	Bonds	Mortgages	Publicly traded shares	Privately traded shares	R&D Grants: e.g. EU Framework Grants	Tax Credits: e.g. accelerated depreciation
Used by	✓ Companies ✓ Governments	✓ Companies ✓ Home owners	✓ Companies	✓ Companies	✓ National & local governments ✓ European Union	✓ National & local governments
Constraints	❖ Ability to pay interest & principal	❖ Ability to pay interest & principal	❖ Capacity to generate profits and pay dividends	❖ Ability to show superior technology and management	❖ For companies, proven capacity to match the subsidy	❖ Ability to make profits to benefit from tax credit
Typical Takers	✓ Institutional Investors, ✓ Financial companies	✓ Retail banks ✓ Building societies	✓ Institutional investors ✓ Individuals	✓ Business angels ✓ Venture capitalists ✓ Corporate venturers	✓ Companies ✓ Universities ✓ Research Institutes	✓ Companies
Purpose	❖ Debt allows companies to pursue their own interests by leveraging profits with little or no impact on control. Unlike equity, debt can attract tax breaks with interest payments treated as a cost. Typically companies choose a mixture of debt and equity that suits their aims and the current state of the economy. E.g. as interest rates fall companies make seek to finance increased investment by debt rather than issuing new equity to shareholders.		❖ Equity gives companies the freedom to pursue their own best interests in the manner they regard as most appropriate, as well affording them the ability to make use various government subsidies, such as EU Framework grants. However, subsidies related to income tax relief require a company to generate taxable profits.		❖ Subsidies can allow both governments and companies to pursue the social welfare & profit simultaneously by promoting economic growth (jobs). In the case of R&D, subsidies encourage firms to pursue socially beneficial projects that otherwise may be lost to society. The drawback for newly emerging companies is that they often do have the capital required to match grants not the profits to benefit from tax breaks.	

Access to Capital: Debt & Equity



condition of debt is the ability to pay the interest charged and the nitial amount borrowed – the principal. This normally requires the ender to be in a position to generate revenues, if not profits.

condition of raising public equity is the capacity to pay dividends nd/or the ability to 'grow' the company, i.e. increase its value. This ormally requires the issuer to be able generate profits out of which ividends can be paid and the company can expand

condition of raising private equity is satisfying private investors that he risks they are taking are justified by the strength of the technology nd the management.

Vithout profits or equity, most seed & early-stage companies have ttle if any capacity to raise debt or make use of public subsidies. They either have the revenues to service the debt nor the equity to match he subsidies.

Access to Capital & Risk: An absence of equity, precludes subsidy for the private sector

Risk

Private Equity Capital: Issued & traded between private individuals or entities

Public Subsidy: If no equity capital is available, it is unlikely that a company can access or make use of public subsidies

Public Equity Capital: Issued & traded on official Stock exchanges

Debt: Often secured against company assets

The promotion of new technologies predicated on public subsidies, will fail to stimulate those independent developers whose lack of equity & human capital precludes them from accessing public subsidies, be they grants or tax breaks

Time

Seed & Early Stage

Established Companies

Access to Capital and Demonstration Projects