

# Economic analysis in practice

## Some recent case experience

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(\*) Disclaimer: the views expressed in this presentation are those of the author and are not necessarily those of the European Commission.

# Overview



- n Introduction
- n Some insights after two years of implementation
  - Market failures
  - Incentive effects
  - Distortions of competition
- n Conclusion

# Introduction



- n Economic Rationale for state aid control
  - n Member states aim to foster own economic development by attracting investment.
  - n They may also affect the competitive position of domestic firms in international markets
  - n Member states do not consider spillover effects on other countries (shift employment, rents, reduce investment abroad)
  - n Uncoordinated actions may degenerate in excessive support
  - n But state aid can still contribute to sound public policy objectives and hence should not be banned per se

# Introduction



- n “Less and better targeted aid”: enhance effectiveness of state aid by striking a better balance between
  - benefits of state aid
    - efficiency rationales: correcting market failures
    - equity rationales: redistribution/cohesion
  - costs of state aid (distortions)
- n Formulated as a “balancing test”
- n Locus: Art. 87(3) EC
- n Economics is about better targeted aid – no presumption about the level of aid

# Balancing test



1. Is the aid measure aimed at a well-defined objective of common interest?
2. Is the aid well designed to deliver the objective of common interest ? In particular, does the proposed aid address a market failure (efficiency) or enhance equity
  - Is State aid an appropriate policy instrument?
  - Is there an incentive effect, i.e. does the aid change the behaviour of firms?
  - Is the aid measure proportional to the problem tackled, i.e. could the same change in behaviour be obtained with less aid?
3. Are the distortions of competition and effect on trade limited, so that the overall balance is positive?

# Implementation



## n In Guidelines/BER

- n Risk capital (2006)
- n R&D&I (2006)
- n Regional aid (2006)
- n BER (2008), Environmental aid (2008)

## n In cases

- n So far mainly in the field of R&D&I (Neoval, Soitec, Homes, TVMSL, Bernin, Osiris, ITP, Genesis,, Maxssimm, Quero, Minimage, VHD, LowCo2motion, H2E, ADNA ...)
- n Training aid cases



"The theory of economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method, rather than a doctrine. An apparatus of the mind, a technique of thinking, which helps its possessors to draw correct conclusions."  
Keynes

# Balancing



- n A balancing exercise requires a common framework to evaluate the elements being weighted
- n Analyse the impact that state aid has on the welfare of all stakeholders (recipient, competitors, input suppliers, consumers)
- n Aid changes the incentives and constraints of the recipient (Induces entry, delays or accelerate exit, expands output, R&D)
- n Which triggers changes in the strategy of competitors (output, investment, R&D)



# Objectives of common interest



- n Can be formulated comprehensively in terms of efficiency (does it contribute to higher output/income) and/or equity (how is distributed)
- n Efficiency is analysed in terms of market failures
- n Equity
  - Are positive effects felt in less developed regions ?
  - Do socially disadvantaged groups benefit ?
- n Potential trade-offs

# Market failures



- n Not a reference to perfect markets
- n Rather a set of factors which lead firms to make incorrect decisions from a public policy prospective
- n Positive externalities/knowledge spill-overs
- n Imperfect and asymmetric information
  - Inability to credibly commit/convey information => inadequate funding
  - Incomplete contracts => coordination problems
  - Network effects, self fulfilling expectations => coordination problems



	Areas	Specific assessment criteria
<i>Externalities:</i>	R&D&I Training Environment aid	<ul style="list-style-type: none"> <li>• Existence of similar projects</li> <li>• Possibility to appropriate the benefits of the activity notably through contracts, Intellectual Property Rights, secrecy</li> <li>• Level of dissemination foreseen</li> <li>• Specificity of the externality produced</li> <li>• Transparency about the nature and magnitude of the external effects produced towards consumers and trading partners</li> </ul>
<i>Imperfect information</i>	Risk Capital, R&D&I Employment Rescue aid	<ul style="list-style-type: none"> <li>• Type of beneficiary, probability of default – collateral</li> <li>• Scope for ex ante evaluation and ex post monitoring of the targeted activity, notably as regards its profitability and/or quality</li> <li>• Availability of information and expertise in the targeted sector and/or about the targeted activity and recipient</li> </ul>
<i>(Coordination problems)</i>	R&D&I Employment aid	<ul style="list-style-type: none"> <li>• Number of undertakings needing to collaborate</li> <li>• Intensity of previous collaboration</li> <li>• Diverging interests between collaboration partners</li> <li>• Problems in designing contracts, importance of unknown contingencies</li> <li>• Problems to coordinate collaboration (linguistic issues, time, distance, travel costs, lack of easy communication channels, sensitive information)</li> </ul>

# Market failures



- n Some misunderstanding. E.g. risk
- n Careful consideration of underlying principles (e.g. pecuniary external effects)
- n Validation remains crude
- n Frequent environmental externalities
- n Government failures

# Incentive effect



- n Incentive effect: does the aid change the behaviour of the firm?
- n Counterfactual: what would the company do without aid?
- n Indicators :
  - Net present value (internal documents, business plans, project finance analysis)
  - Probability of success ? Different scenarios. Fall back option in case of failure
  - “critical probabilities of success”
  - Cost of capital

# Incentive effects



- n Financing constraints
  - Internal ? Scope for abuse
  - External ? Bank loans and equity
- n Confidence in the numbers presented by the parties
- n But improvements in business plans
- n Reports from analysts, banks
- n Marginal effect of public support on overall financial prospects

# Distortions of trade and competition



- n General concern about dynamic incentives. Rents are allocated by governments rather than competition
- n Effects on competitors, which in turn respond and affect market outcomes : reduce output, RDI, investment - Particular concern for effects across borders
- n Effects on employment (and more generally input markets) in other members states
- n Focus on the competitors and input suppliers. Effects on consumers as secondary criteria

# Distortions of trade and competition



- n The tool box of competition economics is useful to understand and evaluate the effects on competitors and market outcomes
- n Market definition to understand which competitors are affected (substitution between products)
- n Misleading to suggest that because state aid control is about state competition and disciplines in the internal market, distortions of competition among firms should not be the focus
- n Interactions among states take place through firms and markets



# Concluding



- n Important progress – learning
- n Transparent trade-offs
- n Beware of outcomes – self selection
- n Complementarity with procedural reform