

Economic policy, 2012-2013

Chapter 1: Concepts

jean pisani-ferry, september 2012

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"Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist.

I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. Not, indeed, immediately, but after a certain interval; for in the field of economic and political philosophy there are not many who are influenced by new theories after they are twenty-five or thirty years of age, so that the ideas which [they] apply to current events are not likely to be the newest.

Soon or late, it is ideas, not vested interests, which are dangerous for good or evil."

John Maynard Keynes (1936), Chapter 24, paragraph V.

If economists could manage to get themselves thought of as humble, competent people on a level with dentists, that would be splendid.

John Maynard Keynes (1931)

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Not the slave of defunct economists?

« Je ne me demande pas chaque matin ce que feraient Ricardo, Keynes ou Hayek. J'écoute ce que me disent les Français. Je prends l'avis de ceux qui sont plus compétents que moi. Je regarde ce qui réussit à l'étranger. »

Nicolas Sarkozy, 7 septembre 2005



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Outline

1.1. A primer on economic policy

- The economist and the Prince: three alternative approaches
- What do policymakers do?

1.2. The whys and hows of public intervention

- The three functions of economic policy
- Why intervene?

1.3 Economic policy evaluation

- Decision criteria
- Ex post evaluation and experiments
- Collateral effects

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Three approaches

- **Positive economics**
 - Outside observer's viewpoint, policy decisions regarded as exogenous
 - *Example: what is the effect of a rise in interest rate?*
- **Normative economics**
 - Economist as the benevolent planner's (the Prince's) adviser
 - Endogenous policy decisions (depend on objectives)
 - Involves trade-offs, implies normative assessment (and thus requires utility function)
 - *Example: what monetary policy to prop up recovery while maintaining long-term stability?*
- **Political economics***
 - Endogenous policy decisions (political equilibrium)
 - Normative judgments amongst *policy regimes*
 - *Example: should the central banks mandate give more emphasis on financial stability?*

* *Political economy in the XVIIIth century = general economics = today's economics*
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Evolution of representations

- Dixit (1996): Start from assumption that the policymaker is an omniscient, omnipotent and benevolent dictator. Then introduce:
 - Imperfect information: s/he is not omniscient
 - Second best: not omnipotent
 - Political economy: not benevolent
- Buchanan (1975):

« *The object of economic research is 'the economy', which is, by definition, a social organization, an interaction among separate choosing entities. [...] there exists no one person, no single chooser, who maximizes for the economy, for the polity [...] That which emerges [from the decision-making process] is that which emerges from results, and that is that* »
- Political economy cautions against policy naiveté

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What policymakers do (in practice)

1. *Set and enforce the rules of the economic game*
2. *Tax and spend*
3. *Issue and manage the currency*
4. *Produce goods and services*
5. *Fix problems (or pretend to)*
6. *Negotiate with other countries*

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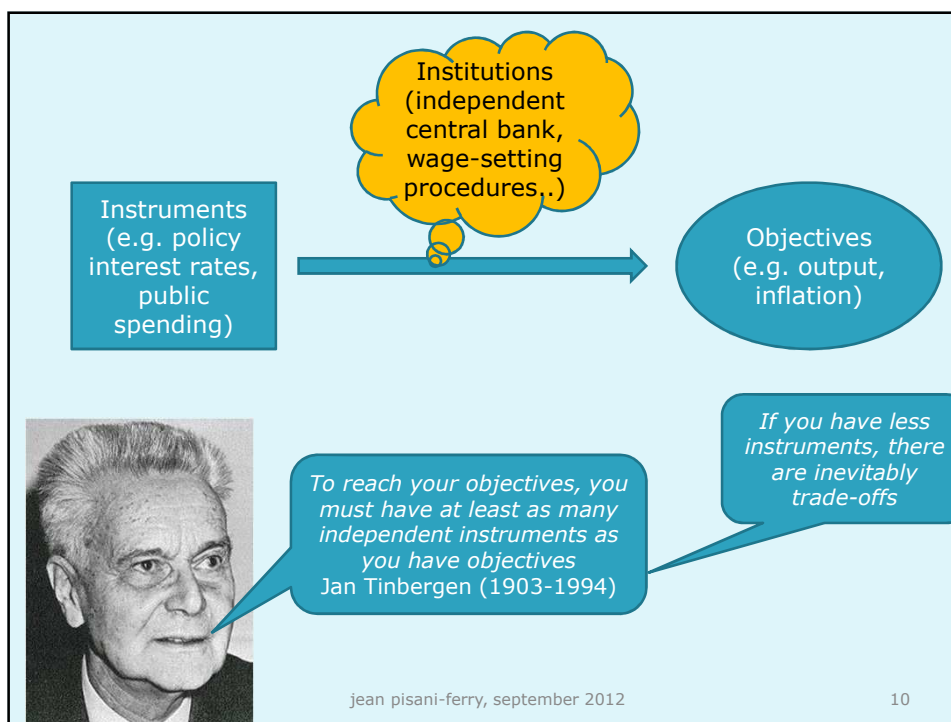
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A simple representation

- Distinguish
 - Objectives (e.g. full employment, price stability)
 - Instruments (e.g. monetary policy, budgetary policy)
 - Institutions (e.g. central bank, labour market institutions)
- Policymakers use instruments to reach objectives, knowing that relationship between the two depends on institutions
- Two approaches
 - Standard approach takes institutions as given
 - Structural reforms aim at changing the institutions

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Standard trade-offs

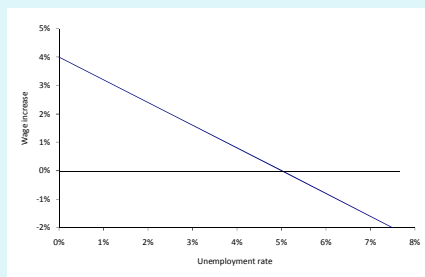
- n objectives, p instruments
- Timbergen rule:
 - If $p = n$, objectives can be reached
 - If $p < n$, trade-offs (e.g. Phillips curve)
- Formally
 - Start from policymaker's loss function $L(Y_1 - \tilde{Y}_1, Y_2 - \tilde{Y}_2, \dots, Y_n - \tilde{Y}_n)$
 - Optimal when $dL = \sum_{i=1}^n \frac{\partial L}{\partial Y_i} dY_i = 0$
 - Implies $\frac{dY_i}{dY_j} = -\frac{\partial L / \partial Y_j}{\partial L / \partial Y_i}$
 - Analogous to Pareto optimisation

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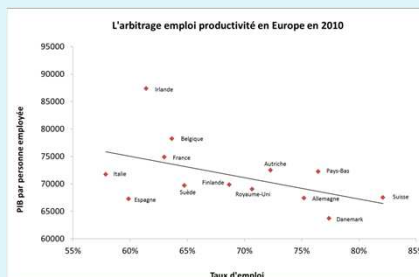
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Some trade-offs

The original Phillips curve



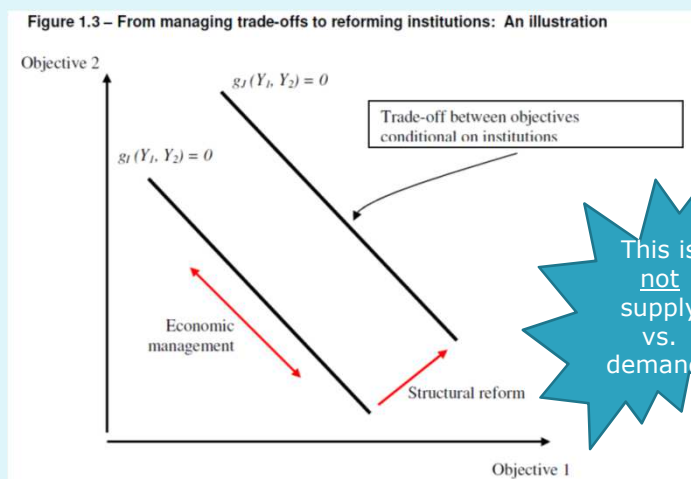
Employment vs. productivity (2010)



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Standard economic management vs. structural reform



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Three functions

Allocation: improve efficiency

Stabilisation: avoid departure from equilibrium

Redistribution: ensure fairness

- Introduced by Musgrave (1989) in public finance context, but of wider use
- Frequent confusion in public discussion

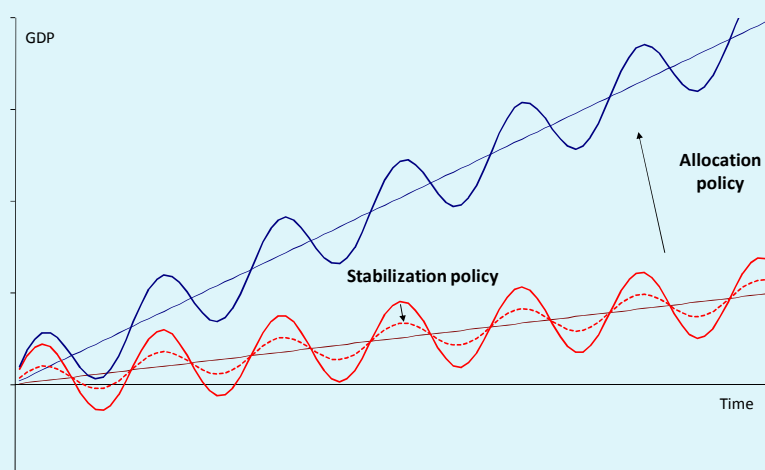
Examples:

- *Allocation measures* are needed to increase *potential output*
- *Stabilisation measures* are needed to reduce *output gap*

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Allocation vs. stabilisation



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Interdependence

- Distinction is valid in first approximation only, the three functions are not truly independent
- **Stabilisation -> Allocation**
 - **Positive:** Schumpeterian 'creative destruction' process (recessions free resources that can be better employed elsewhere). Example: Sweden in the 1990s
 - **Negative:** cost of letting sound companies go bankrupt because of liquidity constraints, loss of human capital, unemployment hysteresis
- **Allocation -> Stabilisation**
 - Institutions may favour resilience to shocks
- **Allocation -> Redistribution**
 - Climate policies have major distributive effects (carbon tax ditched in Fr!)
- **Redistribution -> Allocation**
 - Redistribution can worsen allocation (because of distortionary taxation, see chapter 7) or improve it (reduction of inactivity traps through in-work benefits improves, see chapter 7)
- **Quiz: Redistribution <-> Stabilisation?**

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Why intervene? Allocation

- Justification for intervention based on microeconomic arguments (market failures)
 - **Competition is not perfect**
 - Ex: some firms enjoy market power
 - Response: competition policy, regulation (intellectual property, etc..)
 - **Economic activities have external effects**
 - Ex: global warming, systemic risk from banking activity
 - Response: internalise them through regulation, taxation (of carbon, banks)
 - **Information is imperfect**
 - Ex: consumer protection, financial regulation
 - Response: mandatory information, accounting standards
 - **Markets are incomplete**
 - Ex: human capital is a poor collateral, hard to borrow against future income
 - Response: public education, contingent loans

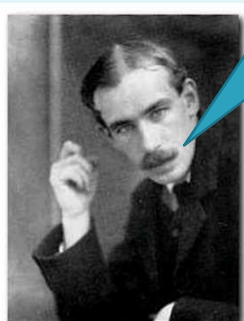
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Why intervene? Stabilisation

*"A large proportion of our positive activities depend on spontaneous optimism rather than on a mathematical expectation, whether moral or hedonistic or economic. Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as a result of **animal spirits**"*

Keynes, General Theory, Chapter 12



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Modern arguments for stabilisation

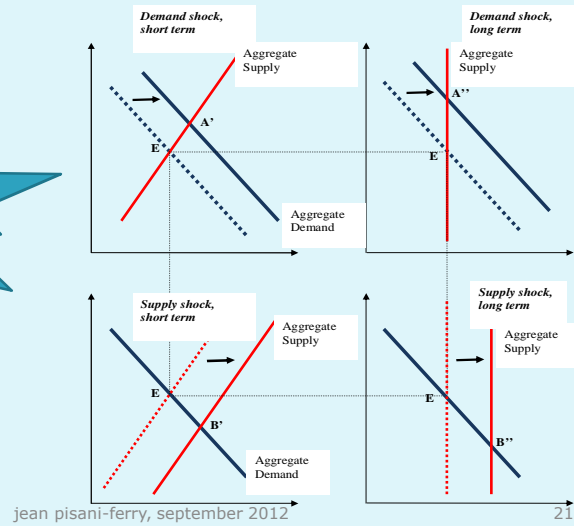
- **Nominal rigidities** prevent relative prices from adjusting
 - Imperfect information: producers mistake a rise in general price level for a rise in their own prices (Lucas, 1972)
 - Wage contracts cos renegotiation costs (Fischer 1977, Taylor 1980)
 - Menu costs (Akerloff-Yellen 1985, Mankiw 1985)
- **Financial instability** (animals spirits redux)
 - Irrational exuberance leading to boom-bust cycles
 - Keynesian approach à la Minsky (1992)

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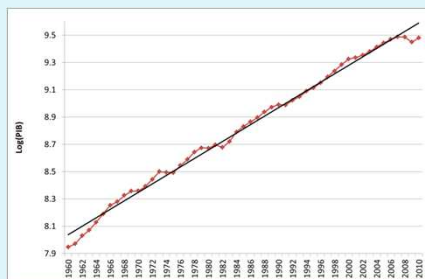
A useful framework: supply vs. demand shocks

Look at the direction of change of output and prices!

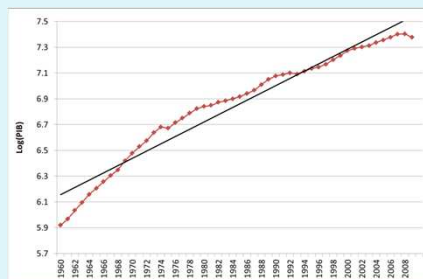


Sometimes cyclical and structural developments are hard to distinguish

GDP 1960-2010: US



GDP 1960-2009: France



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Why intervene? Redistribution

- Two arguments:
 - Pareto optimality (resulting from first welfare theorem) does not amount to social justice
 - As efficiency-enhancing policies (e.g. trade) makes losers, there is case for compensating them
- In principle correcting income distribution could be done in a non-distortionary way through lump-sum transfers
- In practice imperfect information and institutional limitations prevent using them, therefore frequent equity-efficiency trade-offs
- Need for criterion
 - To compare gains and losses w.r. Pareto optimum
 - To help address trade-offs
 - To act consistently

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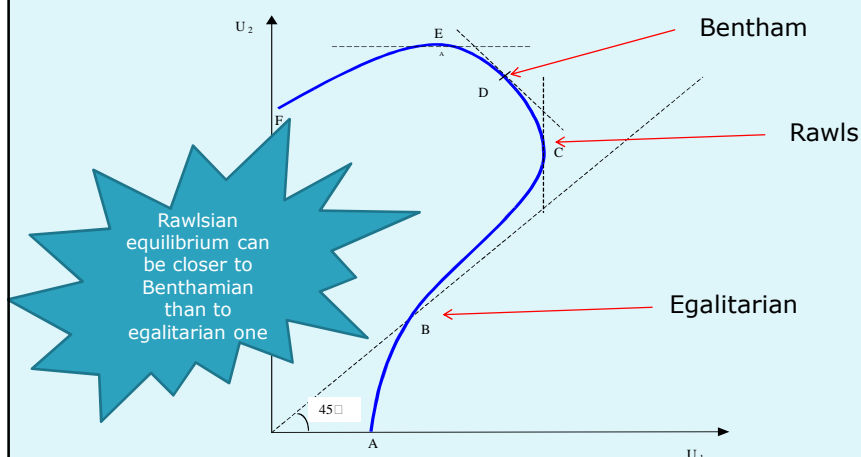
Decision criteria

- In principle $U_i^t = U(C_{i1}^t, C_{i2}^t, \dots, C_{in}^t; N_i^t; E_i^t; \Xi_i^t)$
- Intertemporal aggregation leads to $U_i = \sum_{t=0}^{\infty} \frac{U_i^t}{(1+\rho)^t}$
- Aggregation across individuals?
 - Social welfare function $\Gamma(U_1, U_2, \dots, U_m)$
 - Choice of function:
 - **Benthamian:** $\Gamma = U_1 + U_2 + \dots + U_m$,
 - **Rawlsian:** $\Gamma = \text{Min}(U_1, U_2, \dots, U_m)$
- Normative choices, major consequences

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Illustration



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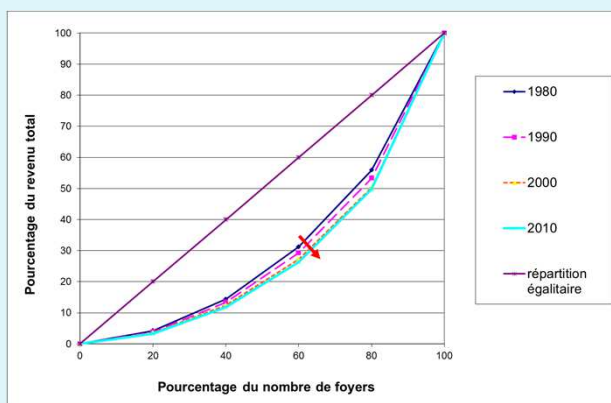
Specific criteria

- In practice evaluation relies on separate criteria
- Allocation:
 - Partial equilibrium (surplus analysis for e.g. trade policy)
 - General equilibrium (CGE models)
- Stabilisation
 - Social welfare function possible (but incoherent to introduce involuntary unemployment)
 - Macro loss function $L_t = E_t \left(\sum_{s=0}^T (1+\rho)^{-s} \sum_{i=1}^N \alpha_i (y_{i,t+s} - \bar{y}^i)^2 \right)$
- Redistribution
 - No use of social welfare functions, rather empirical indicators of inequalities (Lorenz, Gini)

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Inequality indicators: The Lorenz curve (US, before-tax income)



More
and
more
unequal!

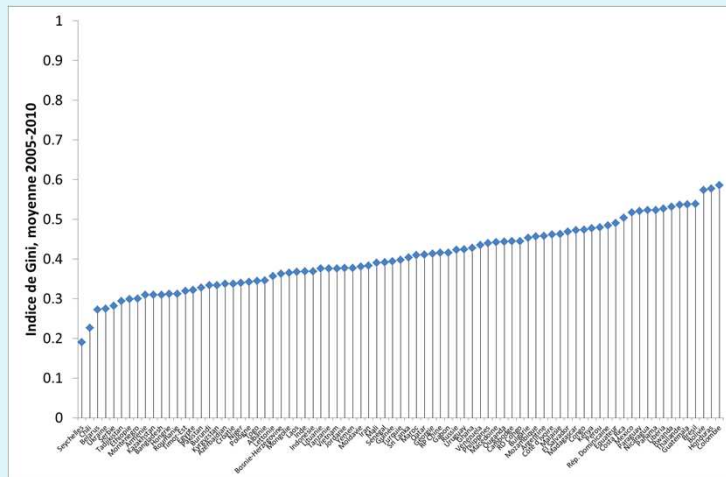
Gini
coefficient

$$G = 1 - \sum_{i=1}^n (x_i - x_{i-1})(y_{i-1} + y_i)$$

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Gini: From Seychelles to Columbia



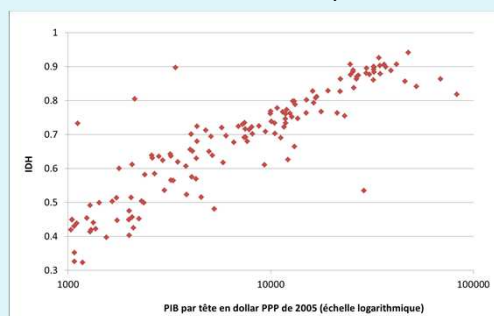
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About GDP

- Widely used in practice
- Misleading because overlooks leisure, externalities
 - (see Stiglitz-Sen-Fitoussi commission report, 2009)
- Alternative measures are in infancy

GDP and Human Development index (187 countries, 2009)



Clear correlation but major outliers!

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Methods for ex ante evaluation

- Partial equilibrium
- Models
- Controlled experiments (e.g. RSA in France)
- Natural experiments (e.g. class size in France)
- Limits to ex ante evaluation
- Limits to ex post evaluation

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Macro models for policy evaluation

Model Type	Keynesian Adaptive Expectations	Keynesian Rational Expectations	Real Business Cycle	Dynamic Stochastic General Equilibrium
Strengths	Allows assessment of the impact of policies and shocks in a unified manner.	Generates more realistic dynamic responses to cyclical disturbances.	Strong theoretical foundations improved supply side.	Integrates aggregate supply and demand responses through microeconomic theory.
Weaknesses	Adaptive expectations allowed policy makers to consistently mislead others, creating a bias toward expansionary policies.	Absence of strong theoretical foundations made it difficult to assess effects of policies on aggregate supply.	Assumption of flexible prices left little room for analysis of macroeconomic policies.	Models are in early stages of development and large ones are difficult to build and run

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Collateral effects

Direct and indirect effects of three public policies (direct effects are indicated in bold type)

	Allocation	Stabilization	Redistribution
Reduction in income tax	+ (increase in labor supply)	+ (increase in demand for goods)	- (increase in inequalities)
Increase in government expenditures	+/- (depends on the content of expenditure and on the possibility of crowding out private expenditure)	+ (by hypothesis)	+/- (depends on the content of expenditure)
Increase in social transfers	- (risk of inactivity trap)	+ (increase in the demand for goods)	+ (reduction in inequalities)

Note: The initial situation is supposed to be characterized by Keynesian unemployment.

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