

Disruptions of the growth process

Arthur Silve

Paris School of Economics
Sciences Po

2013

Course outline

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation

Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

- 1 Introduction
- 2 Domestic imbalances
 - Growth exhaustion
 - Overheating
- 3 Inflation
 - Hyperinflation
- 4 External volatility
 - Current account
 - Capital account
- 5 Financial crisis
 - Unsustainable policy
 - Market inefficiency
 - Contagion
- 6 Sovereign debt crisis
- 7 Dutch disease
- 8 Conclusion

Purpose of this sequence 1/2

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis
Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Identify the main threats to growth and development, from the ST to the LT

- domestic and external absorption volatility (policy mix)
- price volatility and inflation (monetary policy)
- external financial volatility – financial crises (reserves and exchange-rate management)
- domestic financial vulnerabilities – twin crises (financial supervision)
- sovereign debt sustainability (debt management)
- price-competitiveness and the Dutch disease (exchange-rate management and redistribution)
- cost-competitiveness, governance (institutional reform)
- civil conflict (redistribution and institutional reform)

Purpose of this sequence 2/2

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation

Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

The introduction of the “supplementary document to the action fiche and payment dossier” must mention

- key challenges and threats
- and illustrate them with the relevant indicators

Part 1 summarizes key macroeconomic indicators

- to highlight potential sources of instability
- to explain relevant past episodes of stress

Part 2 explores the policy answers to volatility

- how does policy address previously identified sources of vulnerability?
- what are the possible destabilizing consequences of implemented policy?

Negative output gap: key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis
Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

A negative output gap may be characterized by

- rising unemployment
- sluggish growth figures (below potential)
- credit crunch / stagnation

In the ST, such an event may be helped by

- a fiscal stimulus to avoid a supply-side adjustment
- lower interest rates to encourage private actors to consume / invest

The consequences of excess liquidity

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion

Overheating

Inflation

Hyperinflation

External volatility

Current account

Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency

Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Possible causes of excess liquidity / positive output gap

- domestic: excessive credit growth
- external: excessive capital inflows

Possible adverse consequences of excess liquidity

- inflation
- asset price bubbles
- riskier, less performing investments, NPLs
- if external: currency mismatches



Commission
européenne

A case of overheating: Vietnam in 2007

The accounts of the balance of payments in the run-up to the crisis

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion

Overheating

Inflation

Hyperinflation

External volatility

Current account

Capital account

Financial crisis

Unsustainable
policy

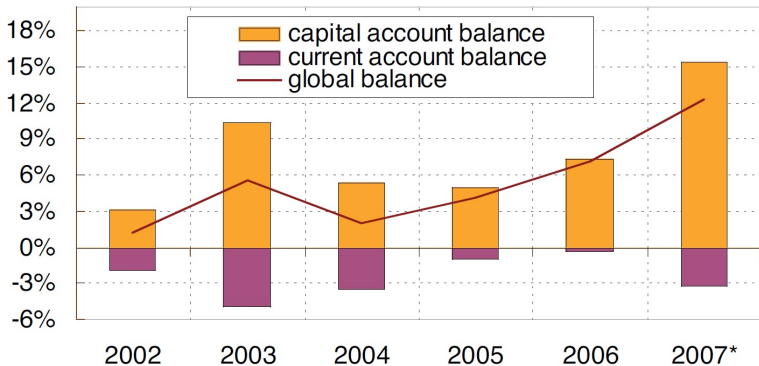
Market
inefficiency

Contagion

Sovereign debt
crisis

Dutch disease

Conclusion



A case of overheating: Vietnam in 2007

fuelled by a fast increase of credits

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion

Overheating

Inflation

Hyperinflation

External volatility

Current account

Capital account

Financial crisis

Unsustainable
policy

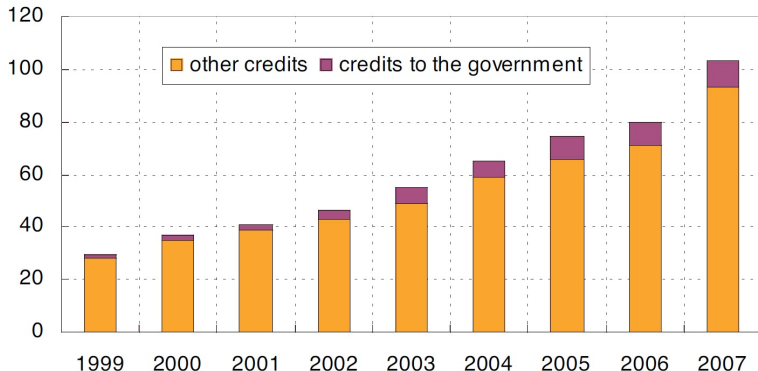
Market
inefficiency

Contagion

Sovereign debt
crisis

Dutch disease

Conclusion



A case of overheating: Vietnam in 2007

Asset price bubble: the VNI

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion

Overheating

Inflation

Hyperinflation

External volatility

Current account

Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency

Contagion

Sovereign debt
crisis

Dutch disease

Conclusion





Commission
européenne

A case of overheating: Vietnam in 2007

a crisis of valuation: inflation and food inflation

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion

Overheating

Inflation

Hyperinflation

External volatility

Current account

Capital account

Financial crisis

Unsustainable
policy

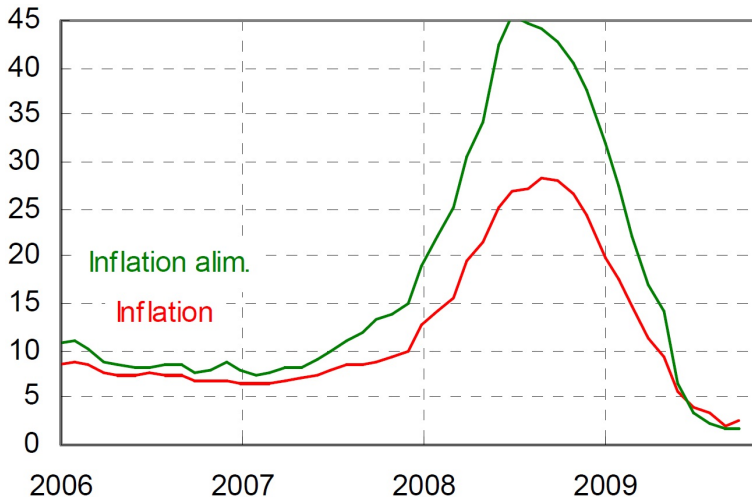
Market
inefficiency

Contagion

Sovereign debt
crisis

Dutch disease

Conclusion



Key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion

Overheating

Inflation

Hyperinflation

External volatility

Current account

Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency

Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Indicators

- capital inflows
- fast credit growth
- increasing inflation
- important asset price variations

Policy response

- inflation: countercyclical monetary policy + credit and capital controls
- no definitive theory of price bubbles: very difficult to diagnose
- NPLs and mismatches: banking and prudential supervision

The consequences of inflation and price volatility

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation

Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

- Inflation is a hindrance on growth
- It is also a symptom of other policy issues
 - fiscal imbalances
 - overheating
 - supply-side cost shocks persistence
 - inertia
- Inflation is a tax on the poor
- Price instability disrupts long term growth

Key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation

Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Inflation in developing countries is expected to be

- positive, not too high (between 2 and 10% is ok), stable
- but higher than in developed countries

Its drivers should be carefully assessed:

- fiscal deficit, monetary expansion, risk of devaluation
- food and oil price shocks

Policy response:

- fiscal conservatism is essential
- objectives and governance of monetary authorities
- external indicators and financial development

Hyperinflation: Magnitude of the disruption

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation

Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

- GDP can shrink by 50% (and even more)
- Banking balance sheets shrink
- vast institutional restructuring

Historical background

Disruptions of the growth process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation

Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Monthly inflation record-breaking in history

- Germany 1923 +3.25M%
- Hungary 1946 +40MB%
- Zimbabwe 2008 +79B%

Key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation

Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Indicators

- high and variable inflation
- weak institutional independence of the CB
- fiscal deficit

Policy response

- fiscal adjustment is CRITICAL
- opening capital markets are essential
- external peg
- Bolivia / Peru: IT / heavy FX intervention
- Brazil / Ukraine: dual ER

External volatility: the global financial crisis

growth in the global financial crisis. Source: Blanchard & Faruqee 2010

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility

Current account
Capital account

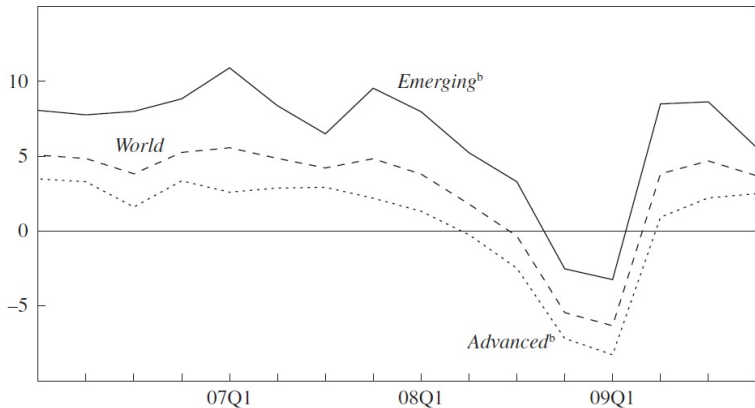
Financial crisis

Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion



Real and nominal shocks: Magnitude of the disruption

Disruptions of the growth process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Instability of export prices has been shown empirically to

- hinder investment, innovation, and investment in children education
- prevent the right allocation of factors between sectors
- generate fiscal instability
- as well as political instability

Historical background: examples

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Burkina Faso's cotton sector

- increased international competition
- no absolute advantage
- but vertical and horizontal linkages

A contrario, the Lomé convention

- quotas and guaranteed prices
- the Mauritian development

Key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Indicators

- commodities in exports
- volatility of the international price of main exports
- mineral commodity redistribution

Policy response

- failure of price agreements
- failure of stabilization funds
- inconclusiveness of commodity forwards markets
- international coordination of donors



Commission
européenne

Example: the global financial crisis

Net capital flows to developing countries, Bn USD. Source: B&F 2010

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion

Overheating

Inflation

Hyperinflation

External volatility

Current account

Capital account

Financial crisis

Unsustainable
policy

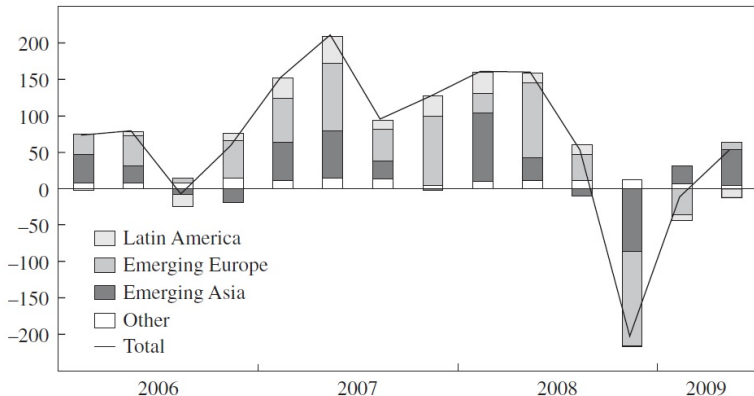
Market
inefficiency

Contagion

Sovereign debt
crisis

Dutch disease

Conclusion



Financial crises: magnitude of the disruption

Disruptions of the growth process

Arthur Silve

Introduction

Domestic imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis

Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

- unemployment rises 7 pp, over 4 years
- GDP declines 9%, roughly over 2 years
- equity prices decline 55% over $3\frac{1}{2}$ years
- real housing prices decline 35% over 6 years
- real value of government debt doubles



Commission
européenne

Historical background

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis

Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Biggest postwar developed country financial crises

- Spain 77, Norway 87, Finland and Sweden 91, Japan 92
- the global financial crisis 2008

Severest emerging market episodes

- 1997-98 Asian crisis (HK, Korea, Malaysia, Philippines, Thailand)
- 1998 Colombia, Russia
- 2001 Argentina

Unsustainable policies: Key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis

Unsustainable
policy

Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

- fiscal deficit
- reserves expressed in months of imports (below 2 months now)
- reserves expressed in % of ST debt (3 times, 40% of external debt – mismatch)
- reserves expressed in % of foreign currency deposits (down to 70% possibility of a run)

Market inefficiencies: Key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis
Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Indicators

- asset price inflation
- rising leverage (low CAR, equity-to-credit etc.)
- currency, maturity mismatches
- large and sustained current account deficit / volatile capital inflows
- slowing growth

Policy response

- financial regulation
- institutional capacity building, esp. communication skills
- sequential opening of the balance of payments

Contagion: In the wake of the Asian crisis

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis
Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

- the Asian crisis itself
- Russia August 1998
- LTCM
- LA and Argentina

Sovereign debt crisis: Magnitude of the disruption

Disruptions of the growth process

Arthur Silve

Introduction

Domestic imbalances

Growth
exhaustion
Overheating

Inflation

Hyperinflation

External volatility

Current account
Capital account

Financial crisis

Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt crisis

Dutch disease

Conclusion

Defaulting on sovereign debt entails a cost. . .

- exclusion from financial markets
 - as retaliation / punishment
 - as reflecting creditworthiness
- limits on external trade and finance

. . . but it also comes with advantages

- reduces debt service
- offers some leeway for expenditure reallocation

Sovereign debt: Key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis

Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Solvency and liquidity indicators

- Fiscal deficit, financing conditions, inflation, growth
- ratio of public debt to GDP and to revenue, CPIA
- short term debt / debt service due

Debt intolerance

- past history of defaults

Policy advice

- fiscal conservatism and expenditure prioritization
- lending policy
- rescheduling / restructuring / cancellation

Overappreciation: A hindrance rather than a crisis

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis
Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

- Abundance of an exported mineral commodity
- Aid dependence
- and an inadequate exchange rate policy

all have the same impact

- dis-industrialization or failure to industrialize
- widespread unemployment



Historical background: discovery of an essential development mechanism

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis
Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

- 1977: The Economist coins the term
- 1991: Barro's African dummy
- 1997: Easterly and Levine's African growth tragedy
- 2001: Sachs and Warner's Resource curse
- 2004: Collier and Hoeffler, Fearon

Key indicators and policy response

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis
Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

Indicators

- unemployment
- cost-competitiveness:
 - international comparison of the costs of labor
 - governance indicators
- price-competitiveness:
 - terms of trade
 - temporal evolution of the REER with various specifications

Policy response

- institutional capacity building
- fight against corruption
- implement a competitive exchange rate

Operational conclusion

Disruptions of
the growth
process

Arthur Silve

Introduction

Domestic
imbalances

Growth
exhaustion
Overheating

Inflation
Hyperinflation

External volatility
Current account
Capital account

Financial crisis
Unsustainable
policy
Market
inefficiency
Contagion

Sovereign debt
crisis

Dutch disease

Conclusion

The “supplementary document to the action fiche and payment dossier” must be ‘risk-oriented’

- Intro: key risks, supported by relevant indicators
- Part 1: main potential sources of instability
- Part 2: how successful is macro policy in stabilizing the country?

You work should be organized in 3 phases

- replace the country in its historical and regional context, adding in a comparison with relevant countries around the world (previous sequence)
- identify key vulnerabilities (this sequence) to structure the whole paper (esp. Part 1)
- see if macro policies rise up the the said vulnerabilities (esp. Part 2)