Theoretical Application of Varieties of Capitalism to the Business Cycle Synchronization Field
OUTLINE

1. Definitions and VoC Applicability
2. Theoretical Mechanism
3. VoC: Economic Growth Drivers
4. VoC: Institutions
5. VoC: Aggregate Demand Management Regime
6. VoC: Business Cycle Influence Channels
7. Institutional Implications for Economic Growth and Business Cycles
8. Gap and Motivation
9. Theoretical Limitations
INTRO AND DEFINITIONS

- **Purpose**: 1) apply a theoretical mechanism of VoC towards BCS; 2) show how and why different models should achieve higher synchronization level.

- **Scholarship on Varieties of Capitalism** (VoC) explores the ways in which the institutions structuring the political economy affect patterns of economic performance or policy making and the distribution of well-being (*Hall, 2009*). Framework puts emphasis on firms as actors and their need to resolve coordination problems in the political economy (*Kuokštis, 2015*).

- **Theory asks**: 1) what are the routes to efficient economic performance? 2) what are the most consequential institutional differences across the economies? 3) what effects follow from them?

- **Institution** - the rules influencing how the economy works and the incentives that motivate people (*Acemoglu, Robinson, 2012*).
Mechanism

EU ECONOMIES

Varieties of Capitalism

Optimal Currency Area

Liberal and Coordinated Economies

Business Cycle Synchronization in Different Capitalisms

Institutional Variables and Determinants of BCS
<table>
<thead>
<tr>
<th>Varieties of Capitalism</th>
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<tbody>
<tr>
<td><strong>Liberal Market Economy</strong></td>
<td><strong>Coordinated Market Economy</strong></td>
</tr>
<tr>
<td><strong>Growth model</strong></td>
<td></td>
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<tr>
<td>Consumption-led</td>
<td>Export-led</td>
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<tr>
<td><strong>Political system</strong></td>
<td></td>
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<tr>
<td>Majoritarian (single-party, Two-party)</td>
<td>Consensus (multi-party, coalition)</td>
</tr>
<tr>
<td><strong>Welfare state</strong></td>
<td></td>
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<tr>
<td>Very weak</td>
<td>Very strong</td>
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<tr>
<td><strong>Workers and firms unions</strong></td>
<td></td>
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<tr>
<td>Very limited</td>
<td>Many strong unions, associations</td>
</tr>
<tr>
<td><strong>Aggregate demand management regime</strong></td>
<td></td>
</tr>
<tr>
<td>Lax budget and accommodating monetary policy</td>
<td>Conservative monetary and non accommodating fiscal policy</td>
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<tr>
<td><strong>Firm coordination</strong></td>
<td></td>
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<tr>
<td>Through competitive markets as a response to price signals of supply and demand</td>
<td>Business association, trade unions, regulatory systems, strategic interaction</td>
</tr>
<tr>
<td><strong>Industrial involvement</strong></td>
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<tr>
<td>Low-wage services and high-tech sectors engaged in radical product innovation</td>
<td>Incremental innovation in manufacturing and diversified quality production</td>
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<tr>
<td><strong>Financial system</strong></td>
<td></td>
</tr>
<tr>
<td>High-medium deregulation</td>
<td>Strictly regulated</td>
</tr>
<tr>
<td><strong>Education and vocation training</strong></td>
<td></td>
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<tr>
<td>Low investments, general skills required</td>
<td>High investments, industry specific skills</td>
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### Groupings

<table>
<thead>
<tr>
<th>Liberal</th>
<th>Coordinated</th>
<th>Mixed</th>
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<tbody>
<tr>
<td>Estonia</td>
<td>Austria</td>
<td>Croatia</td>
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<tr>
<td>Ireland</td>
<td>Belgium</td>
<td>Cyprus</td>
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<tr>
<td>Latvia</td>
<td>Croatia</td>
<td>Greece</td>
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<td>Lithuania</td>
<td>Denmark</td>
<td>Italy</td>
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<td>Slovenia</td>
<td>Finland</td>
<td>Malta</td>
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<tr>
<td>Bulgaria</td>
<td>Sweden</td>
<td>Portugal</td>
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<tr>
<td>Poland</td>
<td>Germany</td>
<td>Spain</td>
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<td>Romania</td>
<td>Hungary</td>
<td>France</td>
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<tr>
<td>Slovakia</td>
<td>Luxembourg</td>
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<tr>
<td>UK</td>
<td>Netherlands</td>
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Models differ not only in their institutional features but also in certain macroeconomic characteristics, most notably industrial specialization, comparative advantage.

Institutions, governing labour, financial and product markets, ADMR differ across countries. These will be characterized by different growth-maximising inflation and debt rates and hence by different conditions for monetary and fiscal policy selection and economic performance (Ernst, 2006; Amable, 2008).
VOC: GROWTH MODELS

Liberal Market Economy: consumption-led.

- Since the organisation of producer groups makes coordinated wage bargaining difficult, these economies are more inclined to pursue consumption-led, economic growth based on the expansion of consumer demand. SMEs responsible for a large portion of economic activity.

- Macroeconomic policy broadly accommodating – designed to push up levels of domestic demand. Inflation serves this growth model because it provides a further stimulus to consumption (disincentive to save).

Coordinated Market Economy: export-led.

- The success of the export and related high value added sectors depends on research and development in knowledge-based companies, on close two way links with the technical university and research systems, and on the system of vocational training.

- High level of coordination among producer groups, thereby facilitating coordinated wage bargaining, cooperation in vocational training schemes that confer high levels of skill and incremental innovation favorable to medium or high-technology production. Strategic coordination is especially important because they give CMEs an instrument for containing the labor costs linked to the competitiveness of exports.
VoC was applied in the field of currency unions.

- **LME**: wanted to pin itself to a low inflation to access low real interest rate. Low interest rates were seen, by consumption led economies as drivers for demand and keys to attracting investment. (*Hancke, 2007*)

- **CME**: do not want to devalue themselves nor for competitors to be able to do so (export-based strategy). Economies are concerned about the external value of the euro. (*Hancke, 2007*)

In the dual growth model, the peripheral states were able to grow rapidly because of access to low real interest rates as well as CME savings generated by external balances. (*Hall, 2012, 2014*)

The growth strategies were complementary: the CME and its institutions directly benefited from the LME and its different institutions and vice versa.
CURRENT ACCOUNT BALANCES AS A PERCENTAGE OF GDP DURING 1990-2008 IN EUROZONE

1990 gap: 11%
1999 gap: 22%
2008 gap: 36%

Source: Iversen, Soskice, Hope (2016)
“Growth models - at least in the way they are conceptualized by Baccaro and Pontusson (2016)—are about the relative contributions to GDP growth made by the different components of aggregate demand. So far it is not very clear why we should expect business cycles to be more synchronized in countries with the same growth/capitalism model. However, it certainly could be the case that countries that rely a lot on credit to fuel their consumption-led growth model (LME) see more similar business cycle fluctuations, it is also likely to be the case that periods of strong consumption-led growth benefit the economies of export-led countries (CME).”

Prof. David Soskice, LSE
Figure 1. The average annual contribution of consumption and net exports to GDP growth (1994-2007)

Source: OECD Annual National Accounts; authors’ calculations.

Note: The black line is a simple linear trend line. The markers correspond to varieties of capitalism. The dark blue diamonds are CMEs and the red points are LMEs. (The light blue squares are MMEs.)
VOC: AGREGGATE DEMAND MANAGEMENT REGIMES

- **Liberal Market Economy**: accommodating countercyclical macroeconomic policy.
- Faced with the same macroeconomic shock would choose expansionary budget policy in order to limit the effects of the negative shock on the level of activity and unemployment. Encouragement of price and wage increases. Due to their limited welfare state LMEs have weaker automatic stabilizers (*Kuokštis*, 2015; *Soskice*, 2016).

- **Coordinated Market Economy**: conservative (fiscal/monetary), restrictive, prioritizing price stability over other macroeconomic objectives.
- Faced with the same macroeconomic shock would choose restrictive budget policy in order to limit the deficit. Encouragement of wage restraint and full employment. Trade unions’ demands for higher wages can translate into higher unemployment, but if they believe that authorities will offset this via expansionary policies, trade unions might be less incentivized to seek wage moderation (*Amable*, 2011; *Soskice*, 2016).

- **This differentiation of ADMR is not random but correspond to a systemic requirements for each type of capitalism.**
VOC: AGREGGATE DEMAND MANAGEMENT REGIMES. LINKAGES

- **LME**: after macroeconomic shock powerful government can take discretionary decisions on fiscal and monetary policy without being concerned that it will be vetoed or opposed (only individual agents, no unions, weak civil society coordination).

- **CME**: governments faced with big number of powerful unions, veto players, associations and civil society agents and are more likely to refrain from discretionary behaviour and prefer conservative monetary, fiscal arrangements.

- Majority of research show the impact of fiscal policy towards fluctuations. I expect different types of capitalisms to pursue different type of fiscal policy. Thus, their fluctuations over time should look alike.

- **VoC**: types of adjustment problems that arise and the range of instruments available for addressing them are conditioned by the institutional organization of the political economy (Amable, 2011).
VOC AND FIRM COORDINATION

1. **LME**: market coordination
2. **CME**: strategic coordination
3. Graph shows that when complementary institutions are present across spheres of the political economy, rates of economic growth are higher.

Source: Iversen, Soskice, Hope (2016)
VOC AND PRODUCTION REGIME

LME
1. Expansion of low-wage services and high-tech sectors with radical innovation - biotech (Acemoglu, Robinson and Verdier, 2012).
2. General skills required and portable across sectors and occupations.
3. Development of entirely new products or technologies.
4. “Ruthless Capitalism”

CME
2. Very specific-industry skills required.
3. Generous unemployment benefits supported as they provide incentives for workers to invest in the industry-specific skills as it is central to production regimes.
4. “Cuddly capitalism”

Differences in educational systems, firm strategy.
VOC AND WELFARE STATE

- **LME**: production regimes demand general skills and do not require existence of generous welfare state. Firms hire and fire workers more readily on a fluid labour market, education and training systems provide general skills, low levels of social benefits.

- **CME**: welfare states are instrumental in stabilizing the skill acquisition system; provides status guarantees that are needed for workers to invest in the specific skills that competitiveness is based on. Industrial relations systems support this by equalizing wages to discourage poaching and by protecting workers against layoffs. Generous unemployment and social protection benefits. More generous social security systems have been brought forward as reasons for conservative fiscal policies (Amable, Azizi 2011) because strong welfare states make discretionary fiscal spending less necessary in times of economic downturns.
VOC AND LABOUR MARKET

- **LME**: decentralised, high labour mobility and flexibility.
- **CME**: centralised, very low mobility, strong unions.

Higher unemployment benefits mean that to be unemployed is a much of a stress to individuals, so that they are less likely to drastically decrease their wage bargain expectation (which feature into the inflation rate) when hit by a shock in unemployment.

In booms firms which know they will be able to dismiss workers once the boom ends will be less reluctant to hire new employees right away. On the other hand tight labor market regulations become especially visible in a recession where firms might not be able to decrease employment as much as they would desire due to legisatory constraints.
Differences in wage bargaining and employment protection have significant impact on BCS (Gnocchi et al. 2012).

„In terms of the institutional factors, we find that differences in governance, labor and capital market institutions are robust determinants of business cycle synchronization.“ (Altug S., et al. 2003)

Using panel data of 19 OECD countries observed over 40 years and data on specific labor market reform episodes it was concluded that labor market institutions matter for business cycle fluctuations.

Spearman partial rank correlations reveal that more flexible institutions are associated with lower business cycle volatility. (Gnocchi, et al. 2015, Journal of Economic Dynamics)
VOC AND POLITICAL SYSTEM

- **LME**: majoritarian. Strong governments, no social players to veto policy.

- **CME**: consensus. Provide framework for interest groups and unions to take part in policy making and strengthen the alliance between society, unions, firms in favour of well-developed welfare state.

Giannone et al. (2010) state: “In principle market orientation, a stable political system and good governance should make countries more resilient to large shocks and thereby mitigate output losses due to recessions.”

Soskice turns to two collective actions problems that CMEs need to resolve and that determines the macroeconomic policy itself: 1) strong commitment to low and stable inflation is necessary in order to keep wage growth under control in the countries with powerful unions and high social inclusion; 2) centralisation of fiscal policy in the hands of politicians committed to fiscal discipline should be considered as a solution to common pool problem of multi party coalition government which is the norm of CME, not the LME.
IDIOSYNCRATIC SHOCKS

- **LME:** the combination of lax monetary policy within the deregulated financial market favours the emergence of asset bubbles which may boost macroeconomic performance until they burst out. They are more prone to develop macroeconomic imbalances as a result of overheating. Reason: 1) heavily rely on financing from volatile equity markets (CME finances from strategic banking interactions); 2) less strictly regulated so can allow for more rapid expansion of financial innovation and speculation.

- **CME:** would damp limited size shocks and amplify larger shocks. Reason: large shocks would make welfare systems appear unsustainable to agents who would consequently increase their savings and thus amplify the shock.

- **Patterns of international investment.** Investors seeking larger returns (more risk) chooses LME. Investors seeking steady returns and lower risk – CME (Goyer, 2011).

- If countries have different labour market institutions, a common shock will lead to distinct economic consequences, resulting in diverging business cycles (Hall, 2016).
MACROECONOMIC SHOCKS AND INSTITUTIONAL INTERCONNECTEDNESS

Successfull macroeconomic performance is a function of institutional coherence. (Hall and Soskice, 2001; Kalaitzidakis, 2003).

Interconnection of production regimes, type of welfare state, political systems, ADMR, labor market would be responsible how the macroeconomic shock will be met (Amable, 2008; Soskice, 2007; Iversen, 2016).

Thus, association with business cycle.
Institutional dynamics not only determine economic shock, but response to the shock as well. (Hall, Gingerich, 2009)

VoC predicts that institutions, policies and shocks will have different effects in the two groups of countries.

Institutions are complementary: stability of one institution is reinforced by the presence of another institutional form (Amable, Polambarini, 2008).

Study finds that the organisation and structure of labor market and capital markets are positively associated with the duration of expansions and the amplitude of contractions (Altug, 2011).

Countries institutional arrangements impact economic performance. (Hall, Gingerich, 2009).

A particular type of coordination in one sphere of the economy may render it advantageous to adopt complementary practices in other areas as well.
Business Cycles in the EU and Varieties of Capitalism

According to Capitalism Model: 1-Liberal, 2-Coordinated, 3-Mixed. Author’s Calculations.
## VOC APPLICATION TO BCS

### Robust BCS determinants according to literature (Beck, 2019; Sachs, Schleer 2013; Altug, 2012; Kufenko, 2015; Kenworthy, 2006; Fonseca, 2010; Baxter and Kouparitsas 2004)

<table>
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<tr>
<th>VoC Assumptions</th>
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<tr>
<td>Bilateral trade and growth regimes</td>
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<tr>
<td>Economic structure similarity (sectoral specialization, share of sector X in total GDP in country Y)</td>
</tr>
<tr>
<td>Convergence in monetary and fiscal policies</td>
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<tr>
<td>Labor market (bargaining power - wage adjustments, employment protection legislation, unemployment compensation, union density)</td>
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<tr>
<td>Political/Financial integration</td>
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Krzysztof Beck (2019) investigates 43 potential determinants of BCS and finds that these are the robust ones:

1. Similarity of production and economic structures.
2. Bilateral trade.
3. Capital and labor market mobility.
4. Wage elasticity and fiscal policy similarity.
5. Correlation of TFP shocks.

Thus, VoC assumptions towards synchronization are institutional and rooted in academic literature.
GAP AND MOTIVATION

1. Loads of research on BCS.
2. Considerable amount of research on institutions and BCS. However set of all VoC institutions with its assumptions were not evaluated in a single study.
3. No research on BCS in the field of comparative capitalism.
4. Euro4Europe Project: “New attitude towards...”
5. Other studies` recommendations to involve additional institutional variables and theories to explain BCS (Kufenko and Geiger 2015; Kenworthy 2006; Hall 2016).
LIMITATIONS

- Institutional factors may also be correlated with other variables making it difficult to identify their separate effects.
- There may exist reverse causality in that countries with higher income may have also developed better and more resilient institutions.
- Institutional variables may be expected to change slowly over time and show relatively little feedback from cyclical phenomena.
- Whether countries cluster into the types of capitalism identified by this framework is a difficult task because the typology turns on forms of coordination that can rarely be measured directly (however, coordination index created by Hall and Gingerich (2009)).
- VoC framework identifies ideal types of capitalisms according to their features. However there is divergence from theoretical expectations. For example, during the Great Recession LME economies applied conservative austerity fiscal policies, which is not what theory dictates.
- VoC is from CPE field.
REFERENCES


