

FINANCIAL DEEPENING AND ECONOMIC GROWTH IN EU3: SHAPLEY-SHUBIK CORE AND GENERAL EQUILIBRIUM

Dr. Keshab Bhattarai

European Economics and Finance Society
Conference, May 22-25, 2008



THE UNIVERSITY OF HULL

Business School

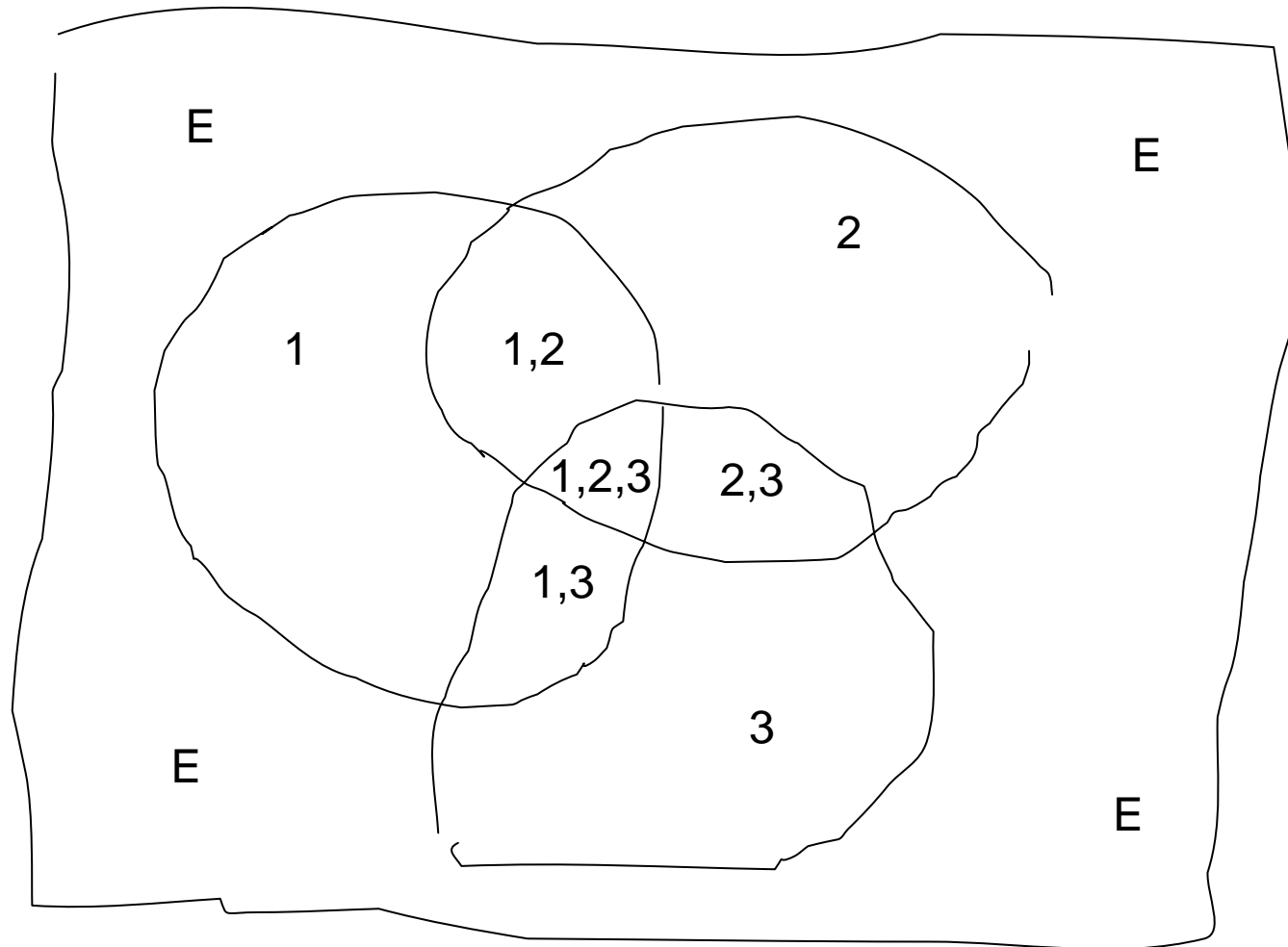
Dynamic Objective Function of Players

$$V = \int_{t=0}^{t=\infty} v(i) e^{-rt} dt$$

Literature

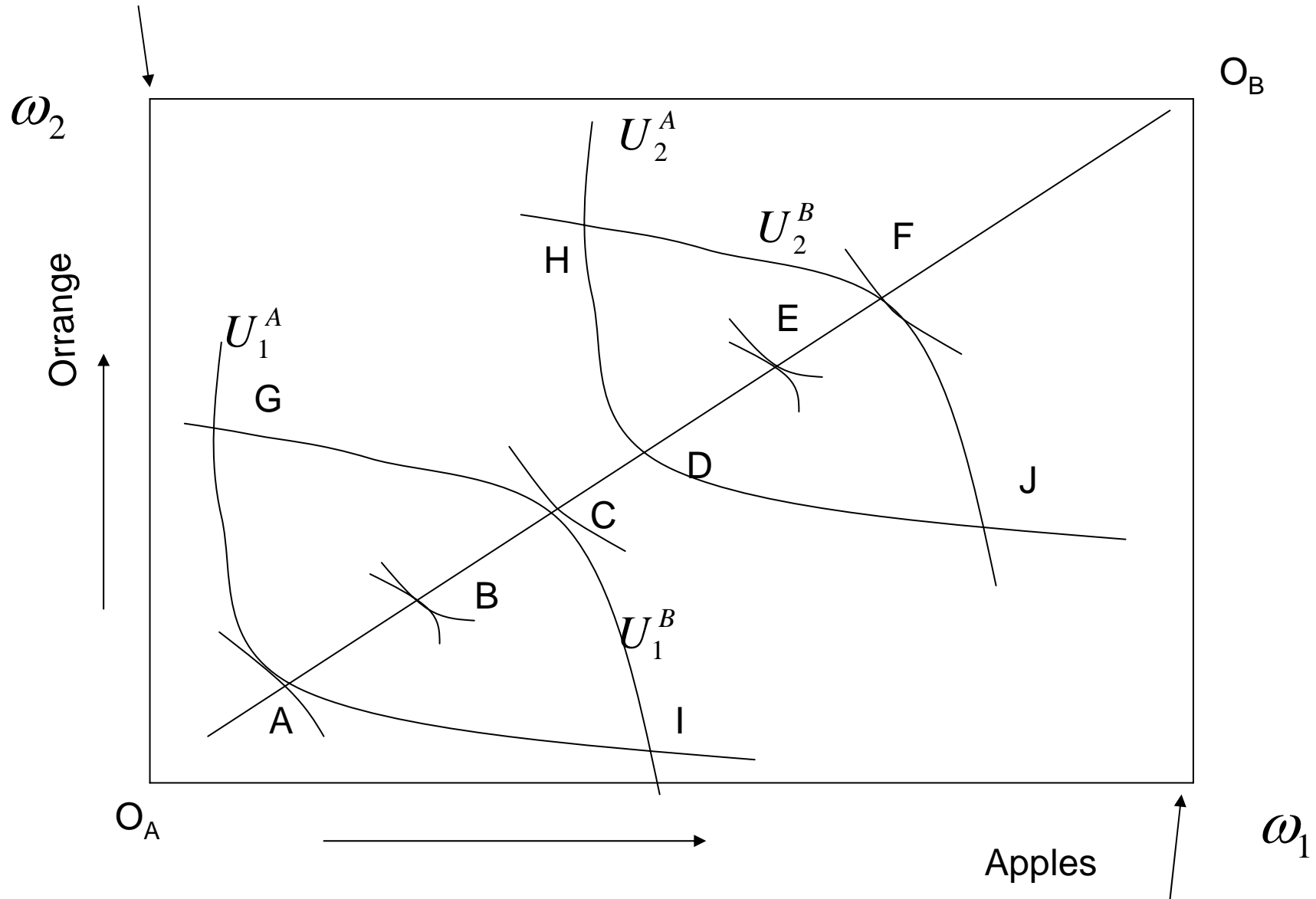
Nash (1951) , Shapley (1953) , Debreu and Scarf (1963), Scarf (1967)
Shapley and Shubik (1969) , McKinnon (1973) ,Shaw(1973)
Fama (1980), Stiglitz and Weiss (1981), Townsend (1983),
Shoven and Whalley (1984), Boyd and Prescott (1986)
Scarf and Shoven (1986), Epstein and Zin (1989)' Greenwood and Boyan (1990)
Roubini and Sala-i-Martin (1992) ; Mercenier and Srinivasan ed. (1994)
Ginsburgh and Keyzer (1997), Levine (1997) . Raghuram and Zingales (1998)
Rutherford (1998) , Hansen , Sargent and Tallarini (1999)
Chari , Kehoe and McGrattan (2000),
Arestis., Demtriades and Luintel (2001)
Bhattarai K (2008)

Shapley Shubik Core in a Venn Diagram



Core value and
Externality
in bargaining
game

Core in General Equilibrium Models

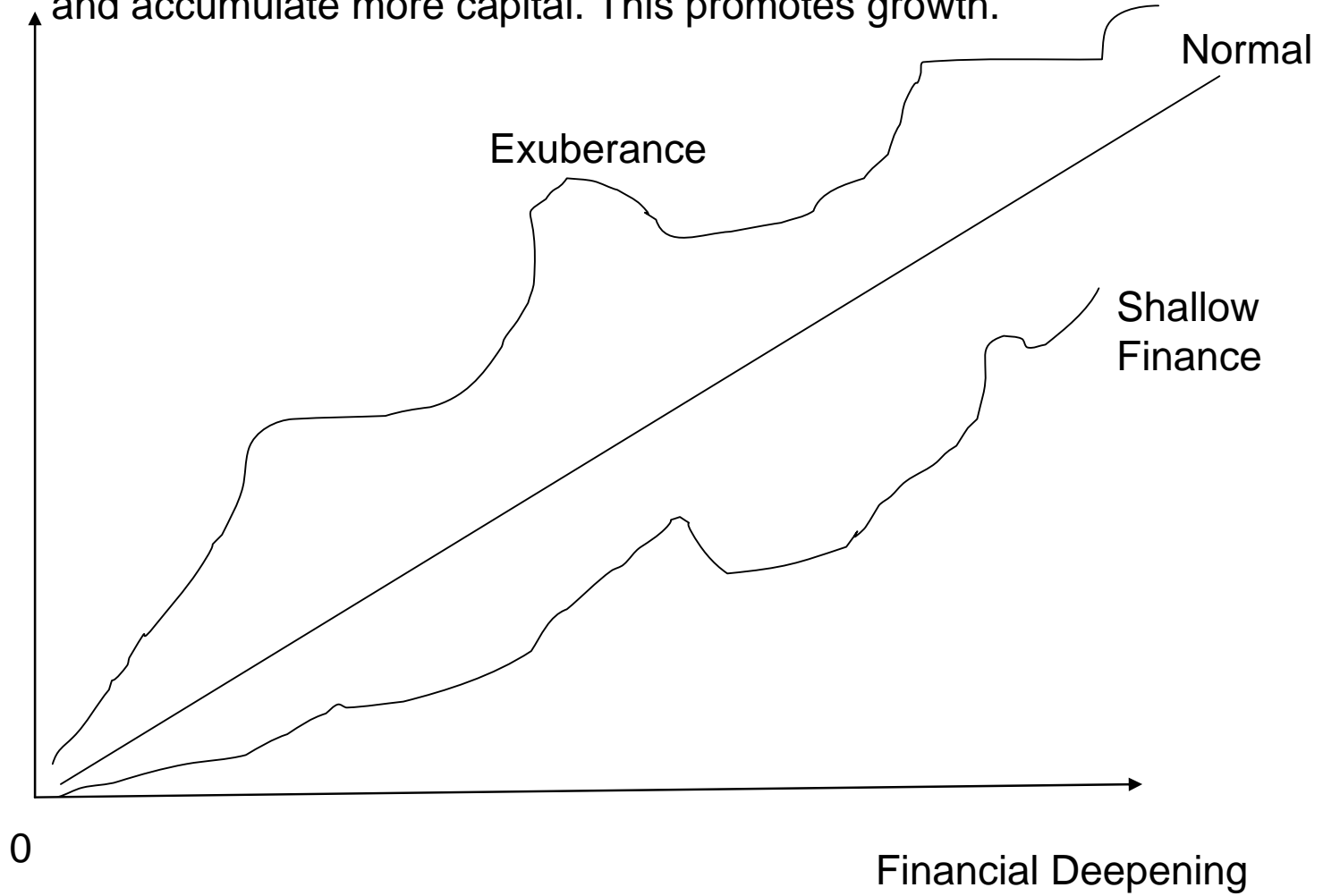


Any allocation is possible within this Edgeworth box.

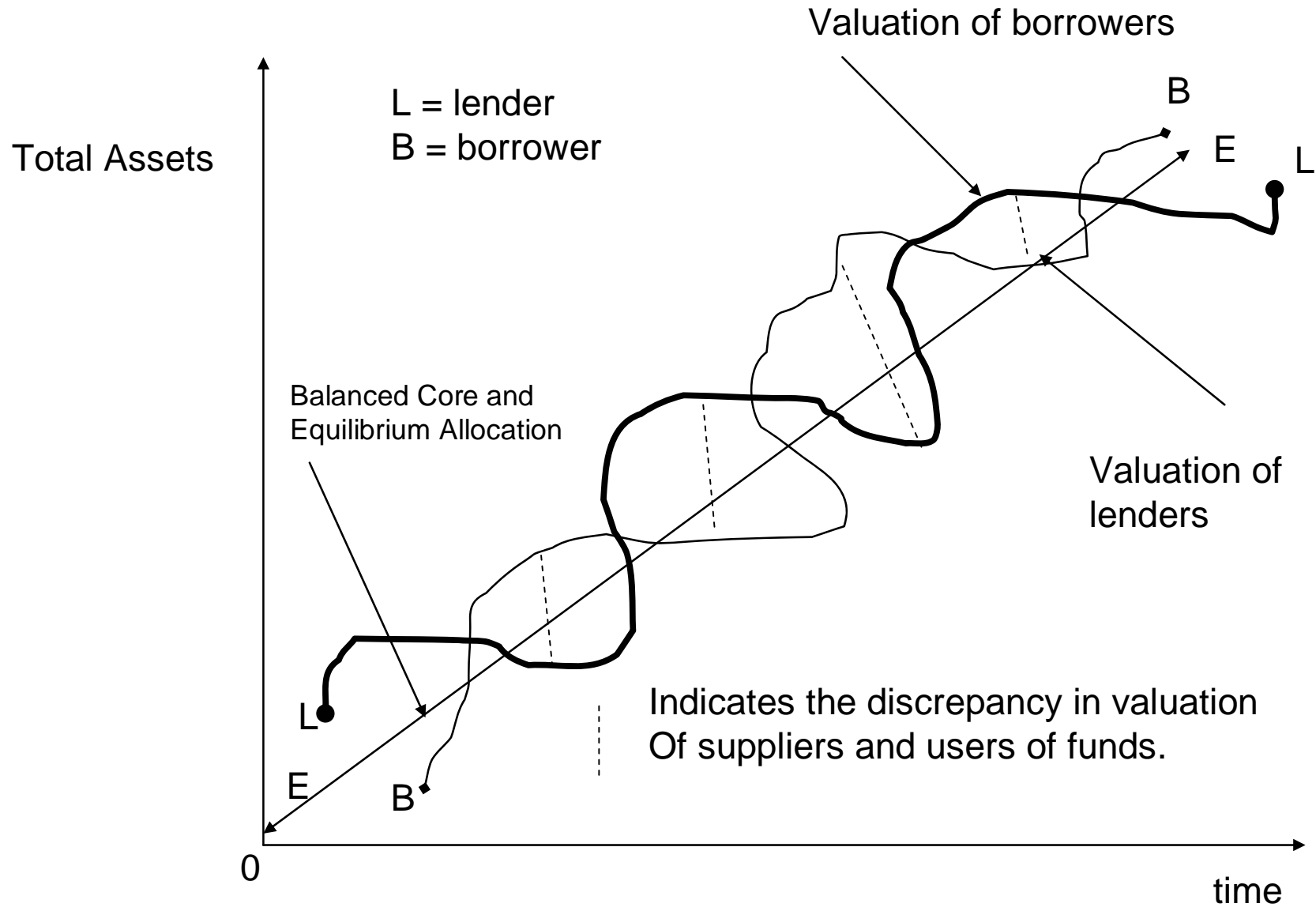
Financial Deepening and Economic Growth

Higher degree of financial development make it easier to invest and accumulate more capital. This promotes growth.

Level of Income



Equilibrium and Core in Asset Markets Over Time



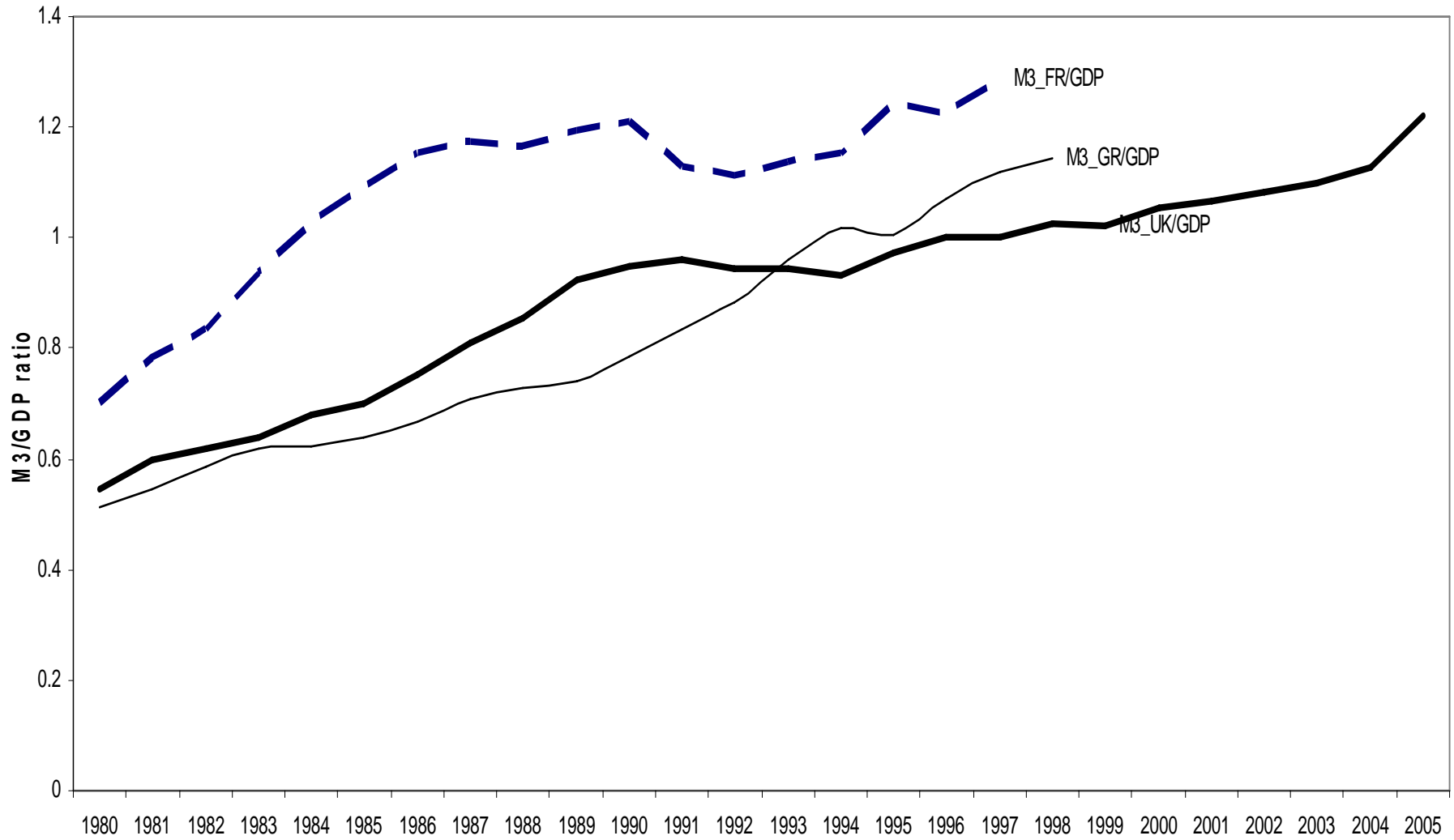
Why Financial Markets are not in the Core? -1

1. Assets are results of consumption saving behaviour resulting from the intertemporal optimisation of households or firms.
2. There is an equilibrium allocation EE for each time period of the economy that is at the core of the equilibrium.
3. Lenders and borrowers start with different amounts of endowments and bargain continuously in order to gain more from the transaction.
4. Underlying productivity and preferences cause differentiation in valuation by the buyers and sellers in the asset market. Therefore the valuation can be generalised in n number of cases.

Why Financial Markets are not in the Core? -2

1. Corrective measures are taken by individuals or the policy makers when these valuations significantly deviate away from the underlying equilibrium destabilising the whole financial system.
2. The asset accumulation profile can contain overlapping generations and has infinite life in contrast to finite life individual traders.
3. There are gains from trading in the financial markets. Whether the lender or the borrowers get the larger share of this gain depends on their bargaining power, which changes over time.

Financial Deepening Index in France, Germany and UK



Competitive Equilibrium in a Nutshell

A pure exchange economy: each individual i is endowed with ω^i endowments, $i = 1 \dots n$.

Competitive allocations be x^i .

Competitive equilibrium implies $\sum_1^n x^i = \sum_1^n \omega^i$

and $u(x_S^i) \geq u(x^i)$.

Equivalence of Core in the Game and the General Equilibrium

In n person game, $T = \{S\}$ the collection of coalitions, is called balanced collection if it is possible to find factors to weight value of allocations to each coalition such that

$$\sum_{\substack{S \in T \\ S \ni \{i\}}} \delta_S = 1 .$$

Competitive allocations are proven to be in core using these weights as:

$$\sum_1^n x^i = \sum_1^n \sum_{\substack{S \in T \\ S \ni \{i\}}} \delta_S x_S^i = \sum_{S \in T} \delta_S \sum_{i \in S} x_S^i = \sum_{S \in T} \delta_S \sum_{i \in S} w^i = \sum_1^n w^i \sum_{\substack{S \in T \\ S \ni \{i\}}} \delta_S = \sum_1^n w^i$$

Power of a Player

- A unique imputation in the core is obtained by Shapley value.
- This reflects additional payoff that each additional player can bring to the existing coalition above the pay-off without this player.
- This is the power of that player.
- Consider a game of three players in which the 3rd player always brings more to the coalition than the 1st or the 2nd player.

Payoff for coalition of empty set: $v(\emptyset) = 0$;

Payoff from players acting alone: $v(1) = 0$; $v(2) = 0$; $v(3) = 0$

Payoff from alternative coalitions: $v(1,2) = 0.1$ $v(1,3) = 0.2$ $v(2,3) = 0.2$

Payoff from the grand coalition: $v(1,2,3) = 1$

Coalitions (parties) playing together generate more value for each of its members than by playing alone.

Team spirit generates extra benefits.

When normalised to 0 and 1 the value of the gains from a coalition are:

$$v(i) = 0 \quad \text{for} \quad i = \{1, 2, \dots, N\} \quad v(N) = 1$$
$$\Pi = (\Pi^1, \Pi^2, \dots, \Pi^n) \quad v(N) = \sum_{i \in N} \Pi^i = \sum_{i=1}^n \Pi^i$$

The fact that payoff of the merged coalition is larger than the sum of the payoff to the separate coalitions

Imputations shows ways on how the value of the game can be distributed among N different players.

The imputations of values characterise these allocations:

Playing in Coalition is better than playing alone

$$v(1) = 0 \quad v(N) = 1 \quad N = \{1, 2, \dots, n\}$$

$$v(1 \cup 2 \cup 3) \geq v(1) + v(2) + v(3)$$

$$v(\{1\}) - v(\{\emptyset\}) = 0$$

$$v(\{1, 2\}) - v(\{2\}) = 0.1 - 0 = 0.1$$

$$v(\{1, 3\}) - v(\{3\}) = 0.2 - 0 = 0.2$$

$$v(\{1, 2, 3\}) - v(\{2, 3\}) = 1 - 0.2 = 0.8$$

Individual, Group and Coalition Rationality

Player 3 more valuable than others

Value of a Coalition

$v(S \cup \{i\} - v(S))$, where S is the subset of players excluding i , $S \cup \{i\}$ is the subset including player i .

The expected values of game for i is found by taking account of all possible coalition that person i can enter with N number of players,

$$\Pi^i = \sum_{S \subset N} \gamma_n(S) [v(S \cup \{i\} - v(S))]$$

where $\gamma_n(S) = \frac{s!(n-s-1)!}{n!}$ is the weighting factor that changes according to the number of people in a particular coalition.

This is the probability that a player joins coalition, $S \in N$ and there are $(2^N - 1)$ ways of forming coalitions in N

Imputed Value for Each Player and Coalition Rationality

$$\Pi = (\Pi^1, \Pi^2, \dots, \Pi^n) \quad v(N) = \sum_{i \in N} \Pi^i = \sum_{i=1}^n \Pi^i$$

$$\Pi^i \geq v(\{i\}) \quad i \in N$$

$$\Pi^i = \sum_{S \subset N} \gamma_n(S) [v(S \cup \{i\}) - v(S)]$$

$$\gamma_0(S) = \frac{s!(n-s-1)!}{n!} = \frac{0!(3-0-1)!}{3!} = \frac{2 \times 1}{3 \times 2 \times 1} = \frac{2}{6}$$

$$\gamma_1(S) = \frac{s!(n-s-1)!}{n!} = \frac{1!(3-1-1)!}{3!} = \frac{1}{3 \times 2 \times 1} = \frac{1}{6}$$

$$\gamma_2(S) = \frac{s!(n-s-1)!}{n!} = \frac{2!(3-2-1)!}{3!} = \frac{2}{3 \times 2 \times 1} = \frac{2}{6}^{16}$$

Value of player 1 and 2 in Coalition

Shapley value for player 1 :

$$\Pi^1 = \sum_{S \subset N} \gamma_n(S) [v(S \cup \{1\}) - v(S)] = \frac{2}{6}(0) + \frac{1}{6}(0.1) + \frac{1}{6}(0.2) + \frac{2}{6}(0.8) = \frac{19}{60}$$

For player 2

$$\Pi^2 = \sum_{S \subset N} \gamma_n(S) [v(S \cup \{2\}) - v(S)] = \frac{2}{6}(0) + \frac{1}{6}(0.1) + \frac{1}{6}(0.2) + \frac{2}{6}(0.8) = \frac{19}{60}$$

Note as before

$$v(\{2\}) - v(\{\emptyset\}) = 0 ; v(\{1,2\}) - v(\{1\}) = 0.1 - 0 = 0.1$$

$$v(\{2,3\}) - v(\{3\}) = 0.2 - 0 = 0.2 ;$$

$$v(\{1,2,3\}) - v(\{1,3\}) = 1 - 0.2 = 0.8$$

Value of player 3 in Coalition

$$\Pi^3 = \sum_{S \subset N} \gamma_n(S) [v(S \cup \{3\}) - v(S)] = \frac{2}{6}(0) + \frac{1}{6}(0.2) + \frac{1}{6}(0.2) + \frac{2}{6}(0.9) = \frac{22}{60}$$

$$v(\{3\}) - v(\{\emptyset\}) = 0$$

$$v(\{1,3\}) - v(\{1\}) = 0.2 - 0 = 0.2$$

$$v(\{2,3\}) - v(\{2\}) = 0.2 - 0 = 0.2$$

$$v(\{1,2,3\}) - v(\{1,2\}) = 1 - 0.1 = 0.9$$

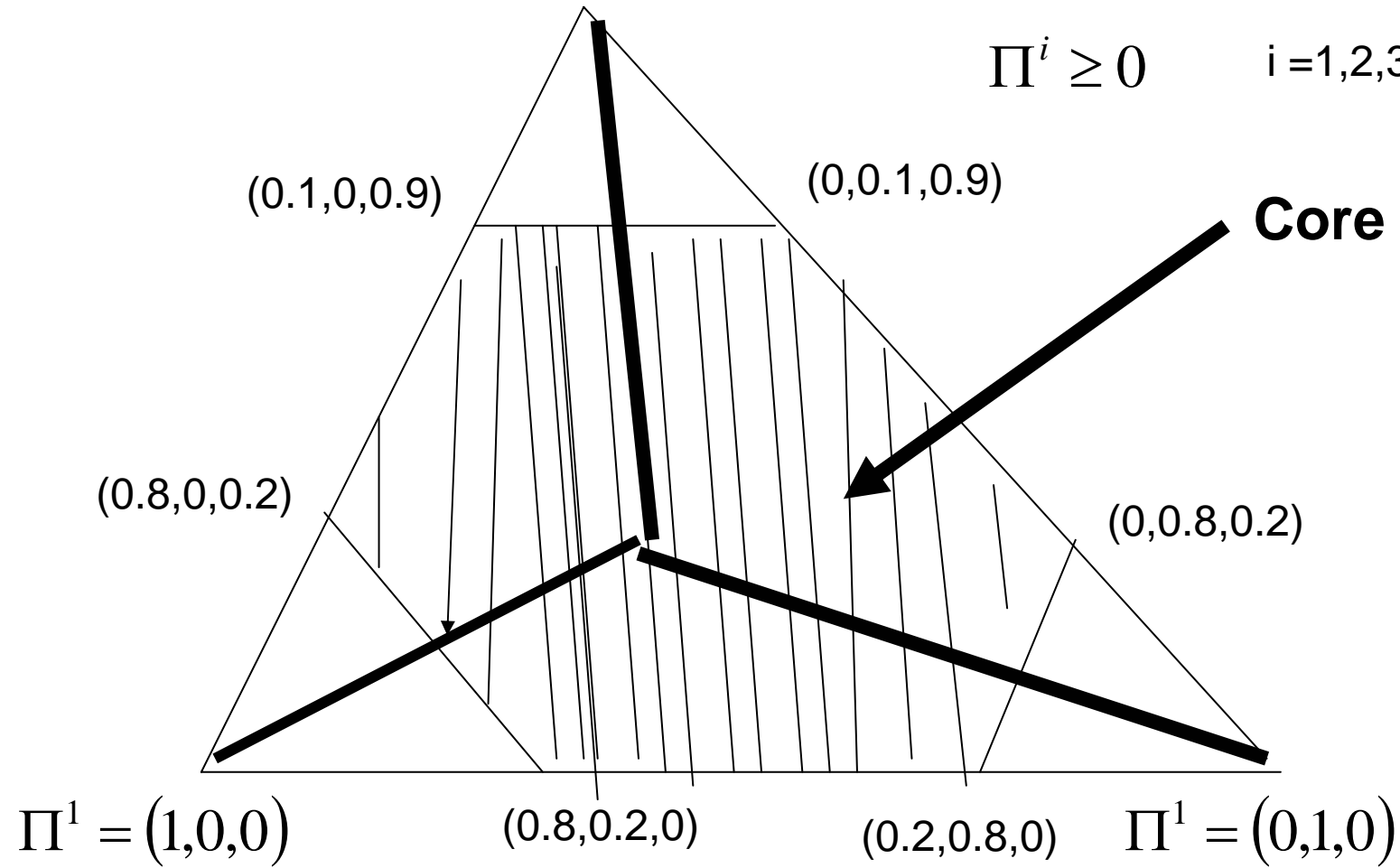
Shapley Values of the Game

Core in a Three Player Game has no blocking coalition

$$\Pi^1 = (0,0,1)$$

$$\Pi^1 + \Pi^2 + \Pi^3 = 1$$

$$\Pi^i \geq 0 \quad i=1,2,3$$



$\Pi_j^i \geq 0$ Imputations should satisfy individual, group and coalition rationality.

Coalition Rationality

- Imputations in the core guarantees, each member of a coalition, a value at least as much as it could be obtained by playing independently.
- At the core of the game each player gets at least as much from the coalition as from the individual action, there does not exist any blocking coalition.
- This is equivalent to Pareto optimal allocation in a competitive equilibrium (Scarf (1967)).
- Some imputations are dominated by others; the core of the game is the strong criteria for dominant imputation.
- Core satisfies coalition rationality.

Pivotal Status

- Ability of a player to influence the outcome of the game depends on the pivotal status enjoyed by that player.
- In a game with 3 players; power of player i is reflected by its Shapley value.
- Consider six possible ordering of 123 pivotal game. Three players can order themselves in $3! = 6$ ways.
- Each of these number can appear only twice in the middle out of six possible combinations.
- A player located in the middle is pivotal.
- If parties realise this fact while bargaining, such bargaining is likely to generate a stable and cooperative solution.
- In the 123 game given in Table 1 the player 3 is pivotal in game (2) and (4); player 1 in (3) and (5) and player 2 in (1) and (6).

Pivotal Player

I. The 123 Game with Rotating Pivotal Party

| Orderings | M(1,S) | M(2,S) | M(3,S) |
|-------------|--------|--------|--------|
| (1). 123 | 0 | 1 | 0 |
| (2). 132 | 0 | 0 | 1 |
| (3). 213 | 1 | 0 | 0 |
| (4). 231 | 0 | 0 | 1 |
| (5). 312 | 1 | 0 | 0 |
| (6). 321 | 0 | 1 | 0 |
| Shapley (i) | 2/6 | 2/6 | 2/6 |

- Therefore each player has 1/3 chance of being pivotal. If 1 is pivotal into the coalition, any coalition with 1 will win - player 1 is powerful. Players 2 and 3 are powerless.
- This outcome is reversed if other players become pivotal. There is always a chance that a pivotal player now may have to give up that position for other players later on.

Game with One Dominant Player

II. The 123 Game with only one Pivotal Party

| Orderings | M(1,S) | M(2,S) | M(3,S) |
|-------------|-----------|-----------|-----------|
| (1). 123 | 1 | 0 | 0 |
| (2). 132 | 1 | 0 | 0 |
| (3). 213 | 1 | 0 | 0 |
| (4). 231 | 1 | 0 | 0 |
| (5). 312 | 1 | 0 | 0 |
| (6). 321 | 1 | 0 | 0 |
| Shapley (i) | $6/6 = 1$ | $0/6 = 0$ | $0/6 = 0$ |

- Another configuration is to assume that certain party is pivotal all the times.
- As shown in Table II, in this situation the Shapley value of player 1 is 1 no matter which position it is in the coalition and it is 0 for players 2 and 3. I

Consumer Preferences

$$U_0 = \sum_{t=1}^{\infty} U_t$$

$$U_t = U_t(C_t, L_t)$$

$$P_t(1 + t_c)C_t + w(1 - t_c) = I_t$$

Firms, Government and Financial Deepening

$$Y_t = F_t(K_t, LS_t, A_t)$$

$$\sum_t^{\infty} R_t = \sum_t^{\infty} G_t$$

$$F_t = \frac{K_t}{Y_t}$$

Market Structure

- Prices of commodities and services and factors of production continue to adjust until the demand and supply are balanced in each market.
- Model has eleven categories of goods and services, capital assets differentiated by sectors, labour differentiated by skills.
- Each economy is linked to the rest of the world for trade with the real exchange rate between domestic and foreign sectors determining the flow of imports and exports.

Table 1: Financial Deepening in France, Germany and UK

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| France | 1.47587 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 | 1.47561 |
| Germany | 1.53980 | 1.53878 | 1.53878 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 | 1.53900 |
| UK | 1.26960 | 1.26892 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 | 1.26903 |

Table 2: Impacts of financial reforms on Investment by sectors in Germany

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | #DIV/0! | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 |
| MANU | 0.96387 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 |
| MATMAN | 0.95057 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 |
| MACHMA | 0.95216 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 |
| UTILIT | 0.94561 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 |
| CONSTR | 0.92460 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 |
| TRHTRS | 0.97872 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 |
| TRNCMM | 0.94869 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 |
| FINRES | 1.35700 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 |
| BUSSRV | 0.91656 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 |
| PRSRV | 0.67465 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 |

Table 3: Impacts of financial reforms on Investment by sectors in France

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 0.61469 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 |
| MANU | 0.93836 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 |
| MATMAN | 0.82421 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 |
| MACHMA | 0.83580 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 |
| UTILIT | 0.91915 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 |
| CONSTR | 0.83989 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 |
| TRHTRS | 0.95117 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 |
| TRNCMM | 0.92623 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 |
| FINRES | 1.44958 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 |
| BUSSRV | 0.82267 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 |
| PRSRV | 0.52353 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 |

Table 4: Investment in Reforms in all sectors in UK under Financial Liberalisation

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 0.84585 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 |
| MANU | #DIV/0! | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 |
| MATMAN | 0.33999 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 |
| MACHMA | #DIV/0! | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 |
| UTILIT | 0.97177 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 |
| CONSTR | 0.95246 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 |
| TRHTRS | 0.99270 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 |
| TRNCMM | 0.97814 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 |
| FINRES | 1.13439 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 |
| BUSSRV | 0.95077 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 |
| PRSRV | 0.77738 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 |

Table 5: Impacts of financial reforms on capital stock by sectors in Germany

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 1.00000 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 | 0.99200 |
| MANU | 1.00000 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 | 0.99726 |
| MATMAN | 1.00000 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 | 0.99076 |
| MACHMA | 1.00000 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 | 0.99057 |
| UTILIT | 1.00000 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 | 0.99372 |
| CONSTR | 1.00000 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 | 0.99129 |
| TRHTRS | 1.00000 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 | 0.99716 |
| TRNCMM | 1.00000 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 | 0.99316 |
| FINRES | 1.00000 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 | 1.03054 |
| BUSSRV | 1.00000 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 | 0.98905 |
| PRSRV | 1.00000 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 | 0.96483 |

Table 6: Impacts of financial reforms on capital stock by sectors in France

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 1.00000 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 | 0.98202 |
| MANU | 1.00000 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 | 0.99323 |
| MATMAN | 1.00000 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 | 0.98021 |
| MACHMA | 1.00000 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 | 0.98294 |
| UTILIT | 1.00000 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 | 0.98769 |
| CONSTR | 1.00000 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 | 0.98061 |
| TRHTRS | 1.00000 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 | 0.99312 |
| TRNCMM | 1.00000 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 | 0.98700 |
| FINRES | 1.00000 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 | 1.04977 |
| BUSSRV | 1.00000 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 | 0.97941 |
| PRSRV | 1.00000 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 | 0.94299 |

Table 7: Impacts of financial reforms on capital stock by sectors in UK

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 1.00000 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 | 0.99279 |
| MANU | 1.00000 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 | 0.99834 |
| MATMAN | 1.00000 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 | 0.99403 |
| MACHMA | 1.00000 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 | 0.99349 |
| UTILIT | 1.00000 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 | 0.99712 |
| CONSTR | 1.00000 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 | 0.99432 |
| TRHTRS | 1.00000 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 | 0.99895 |
| TRNCMM | 1.00000 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 | 0.99774 |
| FINRES | 1.00000 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 | 1.01884 |
| BUSSRV | 1.00000 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 | 0.99398 |
| PRSRV | 1.00000 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 | 0.97336 |

Table 8: Impacts of financial reforms on employment by sectors in Germany

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 1.00637 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 | 1.00490 |
| MANU | 1.01151 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 | 1.01022 |
| MATMAN | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 | 1.00364 |
| MACHMA | 1.00352 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 | 1.00345 |
| UTILIT | 1.00830 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 | 1.00664 |
| CONSTR | 1.00085 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 | 1.00418 |
| TRHTRS | 1.01095 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 | 1.01013 |
| TRNCMM | 1.00713 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 | 1.00607 |
| FINRES | 1.07586 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 | 1.04394 |
| BUSSRV | 1.00092 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 | 1.00191 |
| PRSRV | 0.97123 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 | 0.97737 |

Table 9: Impacts of financial reforms on employment by sectors in France

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 1.00677 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 | 1.00613 |
| MANU | 1.01919 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 | 1.01762 |
| MATMAN | 1.00316 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 | 1.00428 |
| MACHMA | 1.00629 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 | 1.00707 |
| UTILIT | 1.01437 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 | 1.01194 |
| CONSTR | 0.99906 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 | 1.00469 |
| TRHTRS | 1.01963 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 | 1.01750 |
| TRNCMM | 1.01196 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 | 1.01123 |
| FINRES | 1.12445 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 | 1.07555 |
| BUSSRV | 1.00030 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 | 1.00346 |
| PRSRV | 0.95764 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 | 0.96615 |

Table 10: Impacts of financial reforms on employment by sectors in UK

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 1.00031 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 | 1.00168 |
| MANU | 1.00777 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 | 1.00728 |
| MATMAN | 1.00256 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 | 1.00293 |
| MACHMA | 1.00182 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 | 1.00238 |
| UTILIT | 1.00596 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 | 1.00604 |
| CONSTR | 0.99986 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 | 1.00322 |
| TRHTRS | 1.00811 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 | 1.00789 |
| TRNCMM | 1.00588 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 | 1.00667 |
| FINRES | 1.05173 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 | 1.02796 |
| BUSSRV | 1.00091 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 | 1.00288 |
| PRSRV | 0.97763 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 | 0.98207 |

Table 11: Impacts of financial sector reforms on output by sectors in Germany

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 1.00265 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 | 0.99755 |
| MANU | 1.00878 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 | 1.00700 |
| MATMAN | 1.00254 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 | 0.99979 |
| MACHMA | 1.00306 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 | 1.00189 |
| UTILIT | 1.00421 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 | 1.00024 |
| CONSTR | 1.00058 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 | 1.00028 |
| TRHTRS | 1.00855 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 | 1.00705 |
| TRNCMM | 1.00441 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 | 1.00076 |
| FINRES | 1.01882 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 | 1.03403 |
| BUSSRV | 1.00029 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 | 0.99441 |
| PRSRV | 0.97803 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 | 0.97428 |

Table 12: Impacts of financial sector reforms on output by sectors in France

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 1.00178 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 | 0.98829 |
| MANU | 1.01361 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 | 1.00994 |
| MATMAN | 1.00142 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 | 0.99486 |
| MACHMA | 1.00440 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 | 1.00069 |
| UTILIT | 1.00741 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 | 0.99985 |
| CONSTR | 0.99937 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 | 0.99668 |
| TRHTRS | 1.01394 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 | 1.01015 |
| TRNCMM | 1.00831 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 | 1.00319 |
| FINRES | 1.02964 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 | 1.05580 |
| BUSSRV | 0.99998 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 | 0.99492 |
| PRSRV | 0.96605 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 | 0.96119 |

Table 13: Impacts of financial sector reforms on output by sectors in UK

| | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 | 2070 | 2075 | 2080 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PRIMAR | 0.99987 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 | 0.99465 |
| MANU | 1.00574 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 | 1.00505 |
| MATMAN | 1.00210 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 | 1.00124 |
| MACHMA | 1.00124 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 | 1.00041 |
| UTILIT | 1.00241 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 | 1.00073 |
| CONSTR | 0.99992 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 | 0.99937 |
| TRHTRS | 1.00596 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 | 1.00540 |
| TRNCMM | 1.00424 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 | 1.00415 |
| FINRES | 1.01457 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 | 1.02049 |
| BUSSRV | 1.00061 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 | 1.00014 |
| PRSRV | 0.98115 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 | 0.98042 |

Input Output Table of France, 2006 (in Million Euros)

| | Primary | Manu | Mat Manu | Machman | Utility | Constru | TRHTRST | TRNCMM | FINREST | BUSSRV | PRSRV | PRHH | Total | Cons_hh | Cns_nnst | Cons_gov | GFFCFR | Invent | Valueable | Export | Imports |
|----------|---------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|------|-----------|----------|----------|----------|----------|--------|-----------|----------|---------|
| Primary | 11739.3 | 31811.2 | 23652.5 | 34.7 | 5466.3 | 2577.4 | 1747.3 | 14.9 | 16.2 | 94.8 | 2067 | 0 | 79221.6 | 21453.8 | 0 | 3.3 | 1333.9 | 804 | 0 | 10067.6 | 34633 |
| Manu | 6416.7 | 36129 | 5087.1 | 3704.3 | 25.9 | 4303.7 | 10810.1 | 736.9 | 1452.8 | 1028.2 | 9500.5 | 0 | 79195.2 | 109208.3 | 0 | 31.9 | 3174.1 | 141.4 | 1079.4 | 47064.8 | 56559 |
| Mat Manu | 8550.1 | 17560.7 | 109128 | 45261 | 3932.9 | 21534 | 10377.2 | 7539.2 | 3593 | 12224.7 | 17932.4 | 0 | 257633.2 | 47330.6 | 0 | 10244 | 12106 | 3244 | 395.9 | 98407.3 | 102918 |
| Machman | 2628.2 | 1935.1 | 6781.2 | 99367.4 | 853.2 | 9200.9 | 3344.3 | 7564 | 993.7 | 8146 | 10963.5 | 0 | 151777.5 | 47391.5 | 0 | 856 | 75777.4 | 5698.6 | 0 | 149023.1 | 143080 |
| Utility | 959.3 | 2442.8 | 5902.3 | 1727.4 | 5983.5 | 394.6 | 2710.1 | 906.7 | 710.8 | 945.9 | 5175 | 0 | 27858.4 | 21745.9 | 0 | 10.9 | 0 | 632.6 | 0 | 3048 | 268 |
| Constru | 523 | 252.6 | 1681.9 | 570.2 | 2458.5 | 18955.1 | 985.4 | 389.7 | 2415.8 | 1074.2 | 5732 | 0 | 35038.4 | 7502.4 | 0 | 43.4 | 115197.3 | 264.2 | 0 | 0 | 0 |
| TRHTRST | 3092.9 | 6836.3 | 11115.4 | 10439.3 | 231.9 | 4529.2 | 14724.5 | 2042.2 | 981.3 | 5065.8 | 8412.5 | 0 | 67471.3 | 165237.8 | 0 | 6619.2 | 9540.7 | 0 | 0 | 16196.7 | 3061 |
| TRNCMM | 1221.5 | 4404.8 | 10589.5 | 4245.4 | 503.5 | 2790.8 | 12233.4 | 42414.5 | 5256.9 | 11678.8 | 10230.4 | 0 | 105569.5 | 41959.6 | 0 | 369.8 | 1833.3 | 0.3 | 0 | 22271.6 | 7347 |
| FINREST | 2040.8 | 6135.7 | 7885.2 | 6332.6 | 1471.1 | 10359.6 | 18571.2 | 6635.7 | 42577.2 | 14995.9 | 18179.1 | 0 | 135184.1 | 150087.3 | 0 | 10508.7 | 10057.4 | 44.5 | 0 | 3024 | 2131 |
| BUSSRV | 1950.3 | 17724.3 | 28226.6 | 33166.5 | 4614 | 17657.3 | 14928.4 | 8701.3 | 26126.1 | 57192.8 | 23377.9 | 0 | 233665.5 | 12205.8 | 1.3 | 7207.3 | 34712.1 | 156.1 | 1.1 | 19226.5 | 17493 |
| PRSRV | 607.3 | 1605.3 | 3866.3 | 3335.1 | 1106.3 | 1482.1 | 2405.7 | 1623.4 | 3690 | 6561.1 | 13463.9 | 0 | 39746.5 | 77605.6 | 8553.7 | 293935.8 | 4073.1 | 16.2 | 4.5 | 3741.5 | 2379 |
| PRHH | 0 | 0.9 | 2.4 | 1.3 | 0.4 | 0.4 | 14.4 | 0.9 | 28.4 | 10.9 | 11.4 | 0 | 71.4 | 9314.2 | 0 | 23.8 | 22.8 | 0.1 | 0 | 0 | 0 |
| ADJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -33714 | 0 | 0 | 0 | 0 | 0 | 33714 | 0 |
| IMPADJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18298 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| INT INP | 39729.4 | 126838.7 | 213918.4 | 208185.2 | 26647.5 | 93785.1 | 92852 | 78569.4 | 87842.2 | 119019.1 | 125045.6 | 0 | 1212432.6 | 695626.8 | 8555 | 329854.1 | 267828.1 | 11002 | 1480.9 | 405785.1 | 369869 |
| Prd Tax | 1616.3 | 2809.6 | 10203.1 | 8337.4 | 1533.3 | 5494.1 | 7404.3 | 6467.2 | 4885.5 | 6016.4 | 8839.9 | 0 | 63607.1 | 69056.2 | 0 | 0 | 19115.9 | 0 | 0 | 0 | 0 |
| Int Cons | 41345.7 | 129648.3 | 224121.5 | 216522.6 | 28180.8 | 99279.2 | 100256.3 | 85036.6 | 92727.7 | 125035.5 | 133885.5 | 0 | 1276039.7 | 764683 | 8555 | 329854.1 | 286944 | 11002 | 1480.9 | 405785.1 | 369869 |
| VA | 36905.3 | 53687.7 | 102321.3 | 70921.4 | 24847.6 | 58766.8 | 161747.8 | 79621 | 214047.5 | 164647.7 | 291412.9 | 9432 | 1268359 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OS | 27835.3 | 20682.7 | 37599.3 | 18944.4 | 12420.6 | 19513.8 | 48866.8 | 27192 | 152200.5 | 56338.7 | 59524.9 | 0 | 481119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wages | 9079 | 31161 | 59709 | 48630 | 10569 | 37910 | 106261 | 49965 | 47681 | 103165 | 224615 | 9382 | 738127 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Prdn tax | -9 | 1844 | 5013 | 3347 | 1858 | 1343 | 6620 | 2464 | 14166 | 5144 | 7273 | 50 | 49113 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Output | 78251 | 183336 | 326442.8 | 287444 | 53028.4 | 158046 | 262004.1 | 164657.6 | 306775.2 | 289683.2 | 425298.4 | 9432 | 2544398.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Input Output Table of Germany, 2006 (in Million Euros)

| | Primary | Manu | Mat Manu | Machman | Utility | Constru | TRHTRST | TRNCMM | FINREST | BUSSRV | PRSRV | PRHH | Total | Cons_hh | Cns_nnst | Cons_gov | GFFCFR | Invent | Valueable | Export | Imports |
|----------|---------|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|------|-----------|----------|----------|----------|----------|---------|-----------|----------|---------|
| Primary | 2718.1 | 35960.4 | 31325.2 | 799.3 | 4974.1 | 2283.4 | 1716.7 | 378.5 | 890.7 | 393.9 | 2288.8 | 0 | 83729.1 | 20689.8 | 24.7 | 127.5 | 3156.4 | 161.1 | 0 | 5703.4 | 52917 |
| Manu | 4374.5 | 43347.5 | 7289.5 | 6715.9 | 108.1 | 8584.3 | 14610 | 527.9 | 634.5 | 610.4 | 8478.4 | 0 | 95281 | 145897.3 | 3.2 | 1269.1 | 10494.8 | -1107.6 | 0 | 43103.3 | 73441 |
| Mat Manu | 6260.9 | 20203.8 | 155823.3 | 91274 | 3237.5 | 46371.2 | 18008.7 | 9427.8 | 3133.3 | 7826.5 | 16544.4 | 0 | 378111.4 | 69363.1 | 93.3 | 8462.6 | 19558.2 | -3500.1 | 0 | 164653.7 | 149952 |
| Machman | 2271.3 | 3544.6 | 13458.2 | 176105.1 | 4017.7 | 13667.8 | 9070.7 | 7065.4 | 1448.6 | 3512.2 | 12941.5 | 0 | 247103.1 | 74824.5 | 395.3 | 4033.4 | 144911.1 | 6412.6 | 0 | 260310.9 | 176171 |
| Utility | 1641.1 | 3455.4 | 11377.5 | 4565.4 | 3089.4 | 508.9 | 5024.7 | 2326.9 | 1815.6 | 1488.3 | 5449 | 0 | 40742.2 | 24719.9 | 20.9 | 334 | 2916.2 | 0.6 | 0 | 1476.3 | 670 |
| Constru | 1072.9 | 1139.7 | 3630.7 | 3079.8 | 1845.4 | 5559.5 | 3073.3 | 2332.6 | 18183.7 | 2258.5 | 7886.5 | 0 | 50062.6 | 4607.3 | 0 | 816.1 | 169157.6 | 13.1 | 0 | 2081.5 | 3578 |
| TRHTRST | 3111.4 | 12413.8 | 16180.3 | 21302.4 | 1431 | 9775.9 | 23608 | 7293.6 | 1336.1 | 4076.9 | 11410.7 | 0 | 111940.1 | 225536.8 | 17.2 | 11369.9 | 14396.2 | -71.2 | 0 | 34403 | 9782 |
| TRNCMM | 1331.4 | 7203.2 | 15179.5 | 16333.3 | 1412.5 | 3693.1 | 12044.7 | 64052.3 | 4671.5 | 4622 | 12161.1 | 0 | 142704.6 | 69690.3 | 0 | 2966.3 | 5892.8 | 6.6 | 0 | 33646.4 | 23867 |
| FINREST | 1906.4 | 6504.7 | 14552.1 | 14897.2 | 3048.8 | 22751.9 | 40786.6 | 9386.1 | 79173.5 | 21704.9 | 22605.1 | 0 | 237317.3 | 241370.6 | 0 | 3591.9 | 3829.5 | 0 | 0 | 2972.6 | 13912 |
| BUSSRV | 5722.1 | 18510.2 | 41950.8 | 44075.8 | 6833.9 | 12964 | 29433.6 | 13544 | 50591.3 | 53838.3 | 29701.8 | 0 | 307165.8 | 12590.5 | 2107 | 5696.7 | 30206.8 | 67.3 | 0 | 19254.8 | 19169 |
| PRSRV | 2164.1 | 2402.1 | 8576.9 | 2544.1 | 4634.9 | 1500.3 | 9268.4 | 2316.4 | 4841.8 | 14094.1 | 34440.9 | 0 | 86784 | 107424.9 | 37068.4 | 342682.5 | 5480.4 | -2.4 | 0 | 2826.2 | 9834 |
| PRHH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2610 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -21650 | 0 | 0 | 0 | 0 | 0 | 21650 | 0 |
| IMPADJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51830 | 0 | 0 | 0 | 0 | 0 | 2990 | 0 |
| INT INP | 32574.2 | 154685.4 | 319344 | 381692.3 | 34633.3 | 127660.3 | 166645.4 | 118651.5 | 166720.6 | 114426 | 163908.2 | 0 | 1780941.2 | 1029505 | 39730 | 381350 | 410000 | 700 | 0 | 592082.1 | 533293 |
| Prd Tax | 1316.8 | 866 | 2622.9 | 2489.3 | 822.7 | 1662 | 3748.9 | 5292.1 | 8959.8 | 1865.9 | 16352.1 | 0 | 45998.5 | 126990 | 0 | 4220 | 29990 | 0 | 0 | -719 | 0 |
| Int Cons | 33891 | 155551.4 | 321966.9 | 384181.6 | 35456 | 129322.3 | 170394.3 | 123943.6 | 175860.4 | 116291.9 | 180260.3 | 0 | 1826939.7 | 1156495 | 39730 | 385570 | 439990 | 700 | 0 | 591363.1 | 0 |
| VA | 26778.9 | 65948.5 | 164823.1 | 177638.4 | 34084 | 93837.2 | 217416 | 107096.4 | 299489.7 | 241628 | 392169.7 | 2610 | 1823519.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OS | 17208.9 | 20978.5 | 47323.1 | 23148.4 | 16614 | 27837.2 | 51196 | 46146.4 | 227049.7 | 139478 | 96229.7 | 0 | 713209.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wages | 15870 | 43810 | 114080 | 152750 | 15780 | 65210 | 158090 | 61370 | 64650 | 101660 | 304080 | 2610 | 1099960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Prdn tax | -6300 | 1160 | 3420 | 1740 | 1690 | 790 | 8130 | -420 | 7790 | 490 | -8140 | 0 | 10350 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Output | 60669.9 | 221499.9 | 486790 | 561820 | 69540 | 223159.5 | 387810.3 | 231040 | 475170.1 | 357919.9 | 572430 | 2610 | 3650459.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: OECD, DSTO/DOC(2006)8

Input Output Table of United Kingdom, 2006 (in Million GBP)

| | Primary | Manu | Mat Manu | Machman | Utility | Constru | TRHTRST | TRNCMM | FINREST | BUSSRV | PRSRV | PRHH | Total | Cons_hh | Cns_nnst | Cons_gov | GFFCFR | Invent | Valueable | Export | Imports |
|----------|---------|---------|----------|----------|---------|----------|----------|----------|----------|----------|----------|------|-----------|----------|----------|----------|----------|--------|-----------|----------|---------|
| Primary | 4893.7 | 8983.9 | 13549.3 | 50.6 | 8679.1 | 2318.6 | 1825.5 | 242.8 | 152 | 239.6 | 600.5 | 0 | 41535.6 | 11331.5 | 15.5 | 24.2 | 935.5 | 951.4 | 0 | 16693.9 | 16279.7 |
| Manu | 1508.9 | 14435.3 | 3259.5 | 1479.4 | 80.4 | 2550 | 14752.7 | 885.6 | 706.6 | 1133.4 | 4387.7 | 0 | 45179.5 | 77289.8 | 0.4 | 0 | 3848.3 | 181.8 | 37.6 | 11334.7 | 40869.6 |
| Mat Manu | 2966.2 | 10251.1 | 42358.8 | 22719.2 | 1209.6 | 12526.1 | 9282 | 6567.6 | 5536.8 | 5386.7 | 14438.8 | 0 | 133242.9 | 43779.7 | 48 | 0 | 6676.8 | 1691.7 | -0.7 | 41235 | 53157.2 |
| Machman | 1015.3 | 2178.3 | 4501.9 | 38746.6 | 984.9 | 3303.4 | 6359.7 | 8106 | 1463.1 | 2863.2 | 15695.5 | 0 | 85217.9 | 47147.7 | 13.5 | 0 | 46568.1 | 1754.1 | -342 | 77901.9 | 113677 |
| Utility | 704 | 1484.5 | 3938.3 | 1641 | 16800.7 | 393 | 2026.5 | 940.8 | 903.9 | 1205.9 | 2738.8 | 0 | 32777.4 | 16039.6 | 3.4 | 0 | 339.1 | 237.8 | 0 | 209.7 | 397 |
| Constru | 824.6 | 279.8 | 622.4 | 412 | 568.9 | 27618.5 | 1639.9 | 1564.1 | 9889.3 | 840.7 | 4585 | 0 | 48845.2 | 4090.4 | 1.2 | 0 | 64349.1 | -581.6 | 0.5 | 223.7 | 62.5 |
| TRHTRST | 2659.1 | 9933.1 | 13218.1 | 13114.5 | 703.3 | 4892.2 | 14014.6 | 5125.6 | 3613 | 4119.9 | 10919.6 | 0 | 82313 | 135832.8 | 16.1 | 18 | 12202.6 | 5.8 | 307.5 | 32350.9 | 3058.7 |
| TRNCMM | 1361.9 | 3545.1 | 6804.7 | 3192.3 | 365 | 1726.7 | 29330.9 | 30060.7 | 18767.2 | 8462.2 | 9602.6 | 0 | 113219.3 | 36309.3 | 6.8 | 1.5 | 1711.7 | 52.3 | 0 | 12646.6 | 12855.4 |
| FINREST | 2778.5 | 3759.8 | 7284.9 | 5698.9 | 1379.8 | 5869.3 | 21927 | 6678 | 20525.8 | 8163.7 | 11585.7 | 0 | 95651.4 | 108174.8 | 151.3 | 0 | 2786.1 | 116.7 | 0 | 14541 | 3137.7 |
| BUSSRV | 2027.8 | 4857.5 | 7318.3 | 6500.6 | 1373.8 | 7813.2 | 22711.4 | 14638.9 | 28626.6 | 48561.9 | 24211.4 | 0 | 168551.4 | 10431.5 | 650 | 144.7 | 10360.9 | 665.9 | 0 | 24661.6 | 17087 |
| PRSRV | 613.7 | 951.5 | 2859.6 | 1356 | 314.2 | 664.5 | 2985.9 | 3037.9 | 4987.3 | 7110.9 | 38217.8 | 0 | 63099.3 | 55079.2 | 22281.9 | 176901.6 | 3148 | 95.4 | 0 | 6607.8 | 4317.4 |
| PRHH | 0.4 | 0.5 | 1 | 0.6 | | 2.3 | 1.2 | 1.8 | 0.6 | 0.8 | 1.3 | 0 | 10.5 | 3987.1 | 0 | 0 | 0 | 0 | 0 | 0 | 3.8 |
| ADJ | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -14713 | 0 | 0 | 0 | 0 | 0 | 14713 | 0 |
| IMPADJ | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21654 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| INT INP | 21354.1 | 60660.4 | 105716.8 | 94911.7 | 32459.7 | 69677.8 | 126857.3 | 77849.8 | 95172.2 | 88088.9 | 136894.7 | 0 | 909643.4 | 556434.4 | 23188.1 | 177090 | 152926.2 | 5171.3 | 2.9 | 253119.8 | 264903 |
| Prd Tax | 1074.3 | 1858.1 | 3391.5 | 2625.8 | 1296.1 | 3570.9 | 6992.5 | 6047.6 | 5475 | 3655 | 6876.2 | 0 | 42863 | 46914.4 | 0 | 0 | 8283.8 | 99.6 | 0 | 13910 | 0 |
| Int Cons | 22428.4 | 62518.5 | 109108.3 | 97537.5 | 33755.8 | 73248.7 | 133849.8 | 83897.4 | 100647.2 | 91743.9 | 143770.9 | 0 | 952506.4 | 603348.8 | 23188.1 | 177090 | 161210 | 5270.9 | 2.9 | 267029.8 | 264903 |
| VA | 32759.6 | 34479.4 | 64392.1 | 47063.7 | 15454.2 | 43617.4 | 126137.9 | 67194.8 | 117636.8 | 106635.1 | 179125 | 3994 | 838490 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OS | 26536.6 | 9910.4 | 13109.1 | 9825.7 | 9345.2 | 19347.4 | 37195.9 | 20479.8 | 79836.8 | 34277.1 | 29884 | 334 | 290082 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wages | 6207 | 23942 | 50056 | 36519 | 4850 | 23637 | 82230 | 45321 | 37008 | 70597 | 148291 | 3660 | 532318 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Prdn tax | 16 | 627 | 1227 | 719 | 1259 | 633 | 6712 | 1394 | 792 | 1761 | 950 | 0 | 16090 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Output | 55188 | 96997.9 | 173500.4 | 144601.2 | 49210 | 116866.1 | 259987.7 | 151092.2 | 218284 | 198379 | 322895.9 | 3994 | 1790996.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: OECD, DSTO/DOC(2006)8

Conclusion

- Impacts of financial deepening on economic growth are examined with conventional financial asset GDP ratios, Shapley-Shubik core and general equilibrium modelling.
- It focuses on simultaneity between them rather than one way causation as found in traditional McKinnon-Shaw analyses.
- Empirical evidence from Germany, France and UK show how enhanced financial liberalisations can contribute towards growth in the 21st century though separating rather than pooling equilibrium generates efficient market outcome in presence of asymmetric information, particularly when the financial system operates under imperfect competition.