

GERPISA

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The Origins and the Limits of the Productive Models Diversity

Research questions
and research organization problems

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1. Some results of GERPISA works

- an accumulation of social sciences works that don't exist in any other industrial sector
- a change of paradigm:
limited and renewed diversity
- a new research question:
the origin and limits
of productive models diversity

The paradigm of the " limited and renewed diversity "

The observed differences of shape and contents
could not be interpreted
as variants of an universal and irreversible general tendency.

They should be analyzed
as elements of different configurations.

The new paradigm allows us
to integrate much more facts,
than the other paradigms

**Many GERPISA's members
intellectually admit the new paradigm,
but very few implement it in their researches**

Three reasons

1. the auto-makers continue to speak about just in time, teamwork, costs reduction, etc
2. passing from a reasoning by tendencies to a reasoning by differences is not simple
3. the debate within GERPISA about the origin and limits of diversity

The two first methodological obstacles
to implement the paradigm of
the " limited and renewed diversity "
would gradually be surmounted

It remains an important debate between us

The diversity origin debate

At least four positions
appear in the GERPISA members texts:

- * national context
(Ulrich Jurgens,.....)
- * several universal product strategies
(Takahiro Fujimoto, Mari Sako, ...)
- * diversity limited by universal constraints and technology
(Giuseppe Volpato,...)
- * permissible “profit strategies” in each type of “growth mode”
(Robert Boyer/Michel Freyssenet,)

2. Have GERPISA members to overcome this debate collectively?

- Why to pursue the analyze
of the conditions and means of firms longevity?
- The illusions of the lonely work
and its dangers for the research and the researchers
- For the first time, the players of the auto-industry
are not called to adopt *one best way*

3. The implementation of the “limited and renewed diversity” paradigm

- Under apparently general trends,
the diversity of stakes and trajectories

- A descriptive, historic and analytical approach

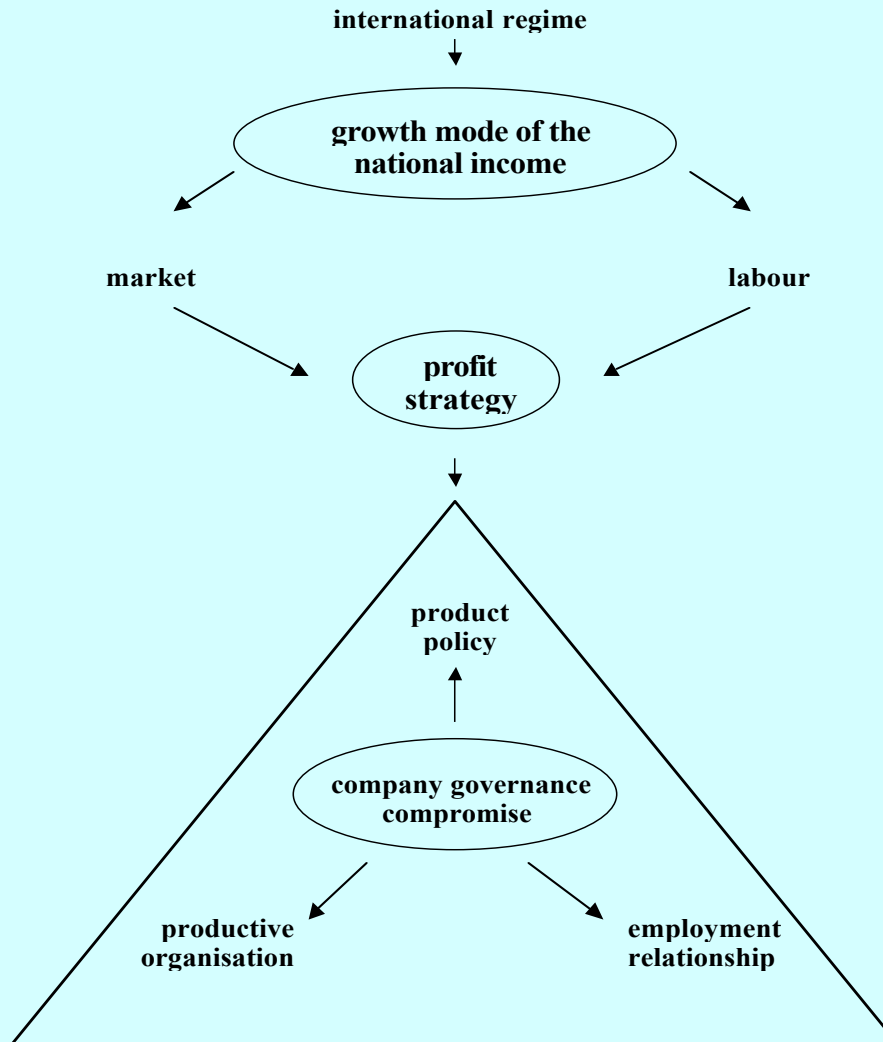
Definition of productive models

Productive models can be defined as

“company governance compromises” enabling

- a durable implementation of those profit strategies that are viable for the growth mode frameworks of the countries in which a firm is organising its activities
- thanks to a series of means (product policy, productive organisation and employment relationship) that are coherent and acceptable to the people involved

THE PRODUCTIVE MODEL in its environment



The plurality of productive models

is predicated

- first of all on a differentiation between **growth modes**
- then on a selection of **profit strategy**
- finally on adoption or invention of **means**
that are **coherent** for implementing this strategy
and **acceptable** to the main players of the firm

The two main conditions of a firm's profitability and a mean's acceptability

The relevancy of the “profit strategy” to the “growth modes”
of the countries in which the firm is operating

The solidity of the “company governance compromise”

that enables the firm's players to discover and to implement
those means (product policy, productive organisation and
employment relationships)

that are both coherent with the profit strategy that has been adopted
and also acceptable to them,

in other words, the ability to invent or to adopt a “productive model”

The principal growth modes

modes	national income		market	labour	dynamics	contradiction
	distribution	growth				
« competitive and competed »		- variable depending on firms' domestic and external competitiveness	- balkanised - unstable - some categories are excluded	- flexible - organises itself on a professional basis	- drop in real prices - limited market due to uncertainty of income	- seeks to defend situation that has been acquired - speculative practices
« competitive and consumer-oriented »	- depends on local and category-specific balance of power and on financial opportunism	- consumption-driven	- heterogeneous - variable	- flexible - organises itself into branch-wide labour unions	- broadening of market - stimulation of investment	- lack of a virtuous circle leading to mass consumption
« competitive and price export-oriented »		- driven by export of competitive standard products	- heterogeneous - unstable - some categories are excluded	- abundant - poorly organised	- rapid industrialisation	- domestic market is limited, lack of a virtuous circle
« co-ordinated and consumer-oriented »		- nationally co-ordinated, moderately hierarchised, geared to productivity	- consumption-driven	- mass-oriented - moderately hierarchised - foreseeable	- organised into unions - makes demands	- total population can access mass consumption
« co-ordinated and specialised export-oriented »	- nationally co-ordinated, moderately hierarchised, geared to export competitiveness	- driven by export of specialised goods or services	- mass-oriented - moderately hierarchised - significant top-of-the-range	- organised into unions - cooperative - stable	- total population can access mass consumption – high wages work in favour of quality products	- risk of getting boxed into one specialisation, likely to become obsolete
« co-ordinated and price export-oriented »		- driven by export of competitive mundane products	- mass-oriented - moderately hierarchised - foreseeable	- organised into unions - cooperative - stable	- total population can access mass consumption	- other countries' reactions, - rise in wages and in exchange rate
« inegalitarian and rent-oriented »	- structurally inegalitarian - vote-catching	- erratic, depends on world prices for raw goods and agricultural products	- categories of owners, executives and dependents - sudden contraction or expansion	- flexible - poorly organised - dependent	- enriched on a period-to-period basis	- industrialisation process runs into significant hurdles
« shortage and investments-oriented »	- relatively egalitarian for most of the population	- depends on savings rate	- very limited - administered - foreseeable	- mobilised	- ensures full employment, creates solid industrial bases	- cannot perpetuate itself indefinitely

Profit strategies, pre-conditions and requirements

Profit strategy	Characteristics	Conditions of relevancy		Implementation requirements			Company governance compromise
		Market	Labour	Product policy	Productive org.	Employment relation	
Diversity and flexibility	<ul style="list-style-type: none"> - Profit margins based on - products that specifically respond to distinct types of demand - rapid adjustment of costs to variations in demand 	<ul style="list-style-type: none"> - heterogeneous, even balkanised - from variable to unstable 	<ul style="list-style-type: none"> - autonomous, flexible and mobile workforce 	<ul style="list-style-type: none"> - models with few parts in common - targeting different customer categories - price that is most lucrative 	<ul style="list-style-type: none"> - design new models rapidly and for lowest cost - production changed whenever necessary 	<ul style="list-style-type: none"> - remuneration of competency and flexibility - incentives so work is carried out within competitive timeframe 	<ul style="list-style-type: none"> - to be developed by shareholders seeking remuneration, employees and suppliers who ought to be flexible and efficient
Quality	<ul style="list-style-type: none"> - Profit margins based on - products socially considered to be « top-of-the-range » or luxury goods - commercial distribution is international from the beginning 	<ul style="list-style-type: none"> - well-to-do and affluent clientele - international 	<ul style="list-style-type: none"> - skilled, working under constraint of having to maintain specialisation on international markets of national production 	<ul style="list-style-type: none"> - offering models that express the social and economic position of a well-to-do and affluent clientele 	<ul style="list-style-type: none"> - guaranteeing quality of supplies, maintaining quality throughout production process - ability to sell prestige factor 	<ul style="list-style-type: none"> - maintaining the rare competencies that guarantee quality and prestige - emphasis on professionalism and on good work 	<ul style="list-style-type: none"> - developed by owners concerned with the brand, by wageearning professionals and by suppliers responsible for quality
Volume	<ul style="list-style-type: none"> - Economies of scale through production of increasing quantities of standard model 	<ul style="list-style-type: none"> - homogeneous - rising national, then international 	<ul style="list-style-type: none"> - abundant, unskilled and unionised workforce 	<ul style="list-style-type: none"> - offering a product that satisfies basic individual transport needs 	<ul style="list-style-type: none"> - standardisation and fluidification of production 	<ul style="list-style-type: none"> - get people to accept undifferentiated work and repetition of identical acts 	<ul style="list-style-type: none"> - to be developed primarily by executives together with most employees
Volume and diversity	<ul style="list-style-type: none"> - Combination of economies of scale for non-visible elements and economies of scope for visible elements 	<ul style="list-style-type: none"> - moderately hierarchised, with transition from one segment to another over product life - national then international 	<ul style="list-style-type: none"> - polyvalent and unionised workforce 	<ul style="list-style-type: none"> - offering superficially different models with shared platforms - excluding niche vehicles, at the very bottom and top-of-range 	<ul style="list-style-type: none"> - control the complexification variety creates in all domains - avoid simultaneous overcapacities or undercapacities 	<ul style="list-style-type: none"> - achieve polyvalency - offering of moderately hierarchised wages - guarantee career development opportunities 	<ul style="list-style-type: none"> - mainly developed by managers together with growing number of engineers and technicians, and with labour unions
Innovation and flexibility	<ul style="list-style-type: none"> - Profit margins based on innovative models that are a response to new expectations - Innovation rent exploited through saturation of potential demand before it is copied - Losses limited through rapid reconversion in case of failure 	<ul style="list-style-type: none"> - partially rejuvenated by the periodically emerging practical and symbolic expectations of new sections within the general population 	<ul style="list-style-type: none"> - entrepreneurial and opportunistic employees 	<ul style="list-style-type: none"> - offering when needed conceptually innovative models that correspond to expectations of those the durable new sections of the population 	<ul style="list-style-type: none"> - generate ability to innovate in a commercially relevant manner - develop highly responsive organisation in all areas 	<ul style="list-style-type: none"> - emphasis on innovation, expertise and responsiveness 	<ul style="list-style-type: none"> - become financially autonomous so as to be able to assume the necessary risks - pact between executives, innovators and responsive employees
Permanent production in low costs	<ul style="list-style-type: none"> - Constant volumes, costs cut in all circumstances - Other profit sources are exploited as long as they do not undermine the costcutting - Makes it possible to avoid taking technical, social, commercial and financial risks 	<ul style="list-style-type: none"> - moderately hierarchised - emphasis on price, reliability and raising level of basic equipment 	<ul style="list-style-type: none"> - semi-skilled and unionised employees - operating under external competitiveness constraint 	<ul style="list-style-type: none"> - strict volume, diversity and quality of product offer - avoid having to innovate conceptually 	<ul style="list-style-type: none"> - avoid major variations in production - design a productive organisation that can be improved on a step-by-step basis 	<ul style="list-style-type: none"> - get employees to accept cost-cutting as well as its effects on jobs and on work 	<ul style="list-style-type: none"> - mainly developed by executives, employees and suppliers - ensure that this is politically acceptable in light of the stringent competitive capacities

Productive models

Models	Profit strategy being implemented	Company governance compromise	Components of the model			Dynamics Risks Contradictions
			Product policy	Productive organisation	Employment relationship	
Taylorian	Diversity and flexibility	"High wages, inexpensive workforce" « scientific » methods	Specific products, varied product offer, medium-sized series	Standard procedures and allocated times, flexibility of equipment and stationary individual workstations	Task-based wages, augmented by 30 to 100% if procedures followed and deadlines met	Conditional increases in productivity
Woollardian	Diversity and flexibility	Autonomy and collective skills, flexibility, capital is well remunerated	Specific products, varied product offer, small & medium-sized series, lucrative price	Workshops for each product or subsystem, mechanisation and synchronisation of supplies	Autonomous teams, Incentivising piecework wages negotiated on a team-by-team basis	Establishment of a « dual » management structure in the firm
Fordian	Volume	Access to mass consumption vs. acceptance of productive organisation	Standard single product, drop in real prices	Production is integrated, continuous, mechanised, timed and broken down into elementary operations	Rising fixed wages, egalitarian, vs. parcellised and repetitive work	Rapid saturation of market, emergence of labour unions making demands
Sloanian	Volume and diversity	Rising purchasing power vs. rising productivity	Hierarchised product range, shared platforms, superficial diversity, many options	Strategic centralisation and operational decentralisation, tools are polyvalent and subcontracting	Wages depend on job being done, polyvalency vs. acceptance of the organisation	Management structure is weighed down, excessive diversity, cannibalisation of products
Toyotian	Permanent reduction of costs at constant volumes	Longevity for firm and for employees' and suppliers' jobs	Well-equipped basic models, good quality that is perceptible to the client	Polyvalent work team, « Just-in-Time » inside and outside of firm	Employment and career guarantee vs. collective participation in reduction of standard times	Limits of social and political acceptability, severe competition in certain situations
Hondian	Innovation and flexibility	Self-funded, individual promotion vs. responsiveness and initiative	Conceptually innovative and specific models, anticipation of customer expectations	Lines, machines and personnel can be quickly converted	Hiring, wages and promotions depend on initiative, expertise and responsiveness	Loss of innovation rent because product is copied rapidly, loss of autonomy

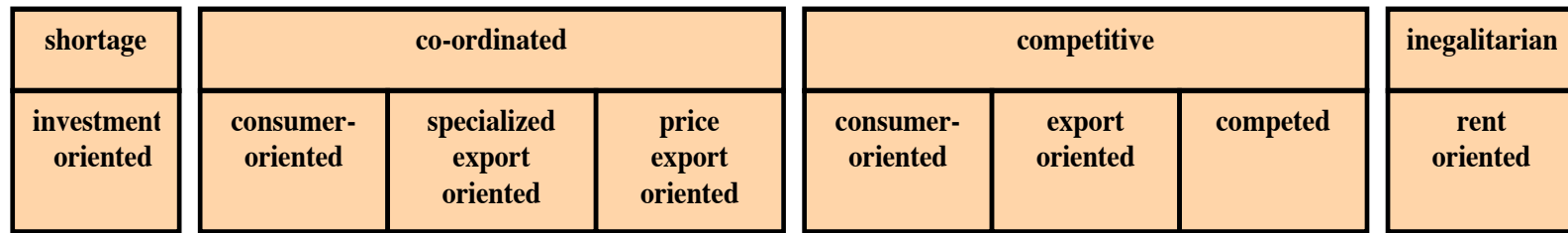
Boyer, R., Freyssenet, M, GERPISA

Links between growth modes, profit strategies and productive models

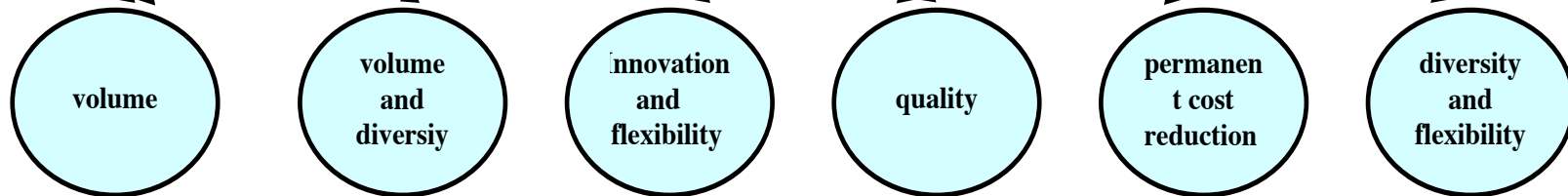
Growth modes
of national income

Forms of
Distribution

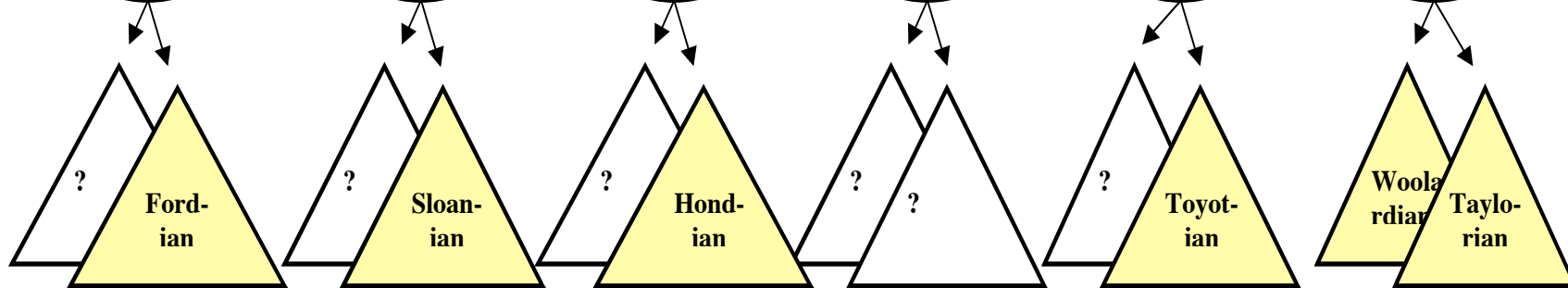
Main
Sources



Profit
Strategies



Productive
Models



Freyssenet M., The Origins and the Limits of the Productive Models Diversity. Research questions and research organization problems, Diapositives pour l'exposé oral, Onzième Rencontre Internationale du GERPISA, "Les acteurs de l'entreprise à la recherche de nouveaux compromis ?", 11-13 juin 2003, Ministère de la Recherche, Paris. Édition numérique, freyssenet.com, 2006, Ko.

**Compatibilité entre les stratégies de profit des firmes
et certaines des "tendances actuelles" dans l'industrie automobile**

Stratégies de profit	Offrir tous les types de véhicules	Mise en commun des plates-formes	Externalisation	Produit et production modulaires	Moteur propre, voiture recyclabl. et silencieuse.	Internationa-lisation	Fusion-acquisition-alliance	Développement des services aux clients	Appel aux marchés financiers
qualité	Non, seulement dans la partie supérieure. des segments de la gamme classique	Non, obligation de "distinction", y compris dans le non-visible	Conserver les savoir-faire qui font l'image de "qualité sociale" du produit	Non, nécessité commerciale d'un produit très intégré	Oui, mais pas avant solution fiable et durable	Indispensable, mais commercialement seulement, production dans le pays d'origine	Incompatibilité avec les firmes ayant tout autre stratégie de profit	Oui, fait partie du service très personnalisée indispensable	Possible, si investisseurs cherchant la sûreté
diversité et flexibilité	Oui, possible, mais pas indispensable	Non, la demande est trop "balkanisée"	Oui, pour disposer de la flexibilité nécessaire	Oui, possible pour certaines clientèles	Oui, pour certaines clientèles	Pas nécessaire, possible dans les pays à distribution concurrentielle du revenu	Possible avec firme ayant la même stratégie mais pas indispensable	Oui, si condition de captation de certaines clientèles	Oui, possibilité de rémunération élevée mais variable
volume	Non, seulement dans les grands segments de marché	Non, modèle standard, et "intégré"	Non, nécessité d'un flux continu	Non, diversité insuffisante	Oui quand synthèse possible des innovations et abaissement rapide du prix	Indispensable, si marché national saturé, vers pays à distrib; coord. et égalitaire	Très profitable si possibilité d'adopter les mêmes modèles	Service standard, minimum indispensable	Non, résistance à l'abaissement des prix en cas de forte de demande
volume et diversité	Non, seulement modèles dont les plateformes peuvent être mises en commun	Indispensable, la diversité est de "surface"	oui, mais en gardant le contrôle des volumes et des prix	Oui, sous forme de sous-ensembles pour l'instant, et si condition d'externalisation remplie	Non, mais copier très vite si demande suffisante et éco. d'échelle possibles	Indispensable, si marché national saturé, vers pays à distrib. coord. et modérément hiérarchisée	Vitale lorsque le marché est durablement de renouvellement obligation de plates-formes communes	Oui, lorsque les économies d'échelle ne peuvent plus être faites sur le produit matériel	Oui, si rémunération stable des capitaux
réduction permanente des coûts	Non, seulement les modèles dont la demande est relativement prévisible	Oui, si la demande est modérément hiérarchisée	Oui, mais en gardant le contrôle technique, et si même stratégie de profit et même modèle prod.	Oui, avec prudence, sous forme de sous-ensembles, et si condition d'externalisation remplie	Non, mais copier très vite si devient la nouvelle norme	Très profitable si possible vers pays à demande prévisible et taux de change stable, mais pas indispensable	Déconseillée, difficulté à trouver une firme ayant la même stratégie	Oui, pour fidéliser la clientèle	Non, trop coûteux, auto-financement
innovation et flexibilité	Non, seulement les modèles conceptuellement innovants	Difficile, quand il s'agit de répondre à des attentes nouvelles	Indispensable, pour produire rapidement en masse si succès, ou pour retirer un modèle si échec	Oui, mais seulement pour certains modèles innovants	Oui, à chaque étape d'innovation	Pas nécessaire si localisée dans une région à distrib. concurrentielle, indispensable si ailleurs	Pas nécessaire, possible avec firme de même stratégie	Non, sauf si constitutif du concept innovant	Non, indispensable d'être indépendant financièrement

4. Some false and true problems of RB/MF analytical framework

1. mis-understandings
2. the pressure of the “international regime”
3. the national institutions and compromises
4. the common productive paradigms
5. the historical periods
6. and some others problems

5. Some ways to solve the previous problems

1. the contradictions of the “international regime”
2. the flexibility of national institutions
3. productive paradigms and productive models
4. the phases of the division of labour

6. What can we do?

1. to try to interrogate our inquiry materials from the point of view of a possible diversity, rather only from the point of view of a necessary or inevitable postulated convergence
2. launching with the support of EU a new international program to analyse the links between international regime, national institutions and compromises and productive models