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Abstract – We propose that the quantum strategy can be considered as a most effective winning virtuous organizational strategy, allowing the board of directors to build a prosperous organization with the optimal business model in the economies of the scale and scopes at the time of the great opportunities and unexpected challenges by the globalization. We provide a concise definition on the quantum strategy: The organizational strategy, which can be derived with the use of the quantum strategy search algorithm by the interlocking interconnecting directors in the board of directors in the modern organization at the time of the global integration. We demonstrate that the quantum strategy search algorithm applies the quantum logic (the probabilistic logic) on the top of the inductive, deductive and abductive logics (the value based logics), aiming to create the most effective optimal winning virtuous organizational strategy by the interlocking interconnecting directors in the board of directors in the modern organization in the information century. We highlight the main existing differences between the multivector strategy (the multiple different strategies implementation at the selected time period) and the quantum strategy (the most effective optimal winning virtuous organizational strategy implementation at the selected time period), considering the real-life case study on the strategy formulation and execution by the interlocking interconnecting directors in the board of directors in the Apple Inc. We express a research opinion that the quantum strategy can be clearly defined/distinguished in line with the generally accepted scientific definitions/meanings/principles in the quantum mechanics science. We think that the prosperous organizations will create and implement the quantum strategies to increase their valuations and outperform the competitors in the economies of the scales and scopes at the time of globalization.

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Keywords multivector strategy, quantum strategy, winning virtuous strategy, strategy creation and implementation, strategy selection logics, strategy decision making, strategy optimization problem, most effective strategy search, quantum/inductive/deductive/abductive logics, board of directors composition, board of directors chairman, interlocking directors networks, boards of directors seats accumulation number, centrality, Freeman degree, Betweenness, information flows measurements, destructive coordination, information absorption, theory of firm, microeconomics, Schrodinger wave function, quantum mechanics, econophysics, Apple Inc.

Introduction

The *fundamental theory of strategy* - a golden key to the successful organisation development – undergoes the process of scientific evolution in a century of information, being enriched by the new research ideas, proposals and conceptions, for example: by the *quantum strategy theory*, in the *business administration science* / the *microeconomics science* in Chandler (1962, 1998; 1977, 1993; 1994; 2001; 2005), Chandler, Daems (1980), Andrews (1971a, b, 1980, 1981a, b, 1984), Rumelt (1974, 1982), Porter (1979, 1980, 1982a, b, 1983, 1985, 1987a, b, 1991, 1994a, b, 1996a, b, 1997, 2001a, b, 2008, December 2013), Porter, Harrigan (1981), Porter, Salter (1982), Montgomery, Porter (1991), Porter, Rivkin (2000), Porter, Sakakibara (2004), Anand, Bradley, Ghemawat, Khanna, Montgomery, Porter, Rivkin, Rukstad, Wells, Yoffie (2005), Porter, Kramer (2006), Porter, Heppelmann (November 2014), Schendel, Hofer (1979), Yelle (1979), Dess, Davis (1984), Schwenk (1984), Pitol-Belin (1984), Hambrick (1985), Palepu (1985), Barney (1986, 1991), Huff, Reger (1987), Hill, Snell (1988), Hill, Jones (1998, 2004), Baysinger, Hoskisson (1989), Rue, Holland (1989), Fombrun, Shanley (1990), Pearson (1990), Ansoff (1991), Goold (1991), Goold, Luchs (1993), Goold et al (1994), Goold, Campbell (September, October 1998), Alexander, Goold, Collis, Campbell, Lieberthal, Montgomery, Palepu, Prahalad, Stalk, Khanna, Hart, Shulman, Evans (1992, 1995, 1996, 1997, 1998, 1999), Yip (1992, 1998, 2000, 2007), Campbell et al (1995), Johnson, Scholes (1997), Johnson, Scholes, Whittington (1998), Johnson, Scholes, Whittington (2002, 2003), McKiernan (1997), Child, Faulkner (1998), Martin (1998-1999, 2004, 2005-2006, 2007a,b, 2008, 2009), Moldoveanu, Martin (2001), Lafley, Martin (2013), Shiryayev (1999), Laffont, Tirole (1999), Grant (2001), Welch (2001a, b), Choo, Bontis (2002), Drejer (2002), Sadler (2003), Gavetti, Levinthal (2004), Gavetti, Rivkin (2007), Roney (2004), Thietart, Xuereb (2005), Godard (2006), Ireland, Hoskisson, Hitt (2006), Hitt, Ireland, Hoskisson (2007), Lorino, Tarondeau (2006), Besanko, Shanley, Dranove (2007), Sull (2007a, b, c, d, 2008), Teece, Winter (2007), Samuels (2008), Chamberlain (2010), Holt, Cameron (2010), Ledenyov D O, Ledenyov V O (2015b, n).

Indeed, the *quantum strategy theory* as a research subject of considerable scientific interest attracts an increasing research attention by the academicians and practitioners in the *business administration science* and in the *microeconomics science* around the World in Ledenyov D O, Ledenyov V O (2015n). Thus, let us explain that the *quantum strategy* represents an *organizational strategy*, which can be derived with the use of the *quantum strategy search algorithm* by the *interlocking interconnecting directors* in the *board of directors* in the *modern organization* at the time of the *global integration*. The *quantum strategy search algorithm*

applies the *quantum logic* (the *probabilistic logic*) on the top of the *inductive, deductive and abductive logics* (the *value based logics*), aiming to create the *most effective optimal winning virtuous organizational strategy* by the *interlocking interconnecting directors* in the *board of directors* in the *modern organization* in an *information century* in Ledenyov D O, Ledenyov V O (2015n).

In this research article, we would like to be focused on the *theory of the quantum strategy creation and execution* in Ledenyov D O, Ledenyov V O (2015n) by the *interlocking interconnecting directors* in the *boards of directors* in the *modern organizations* in the *modern economies of the scales and scopes* in the *time of constant introduction* of the *market-creating innovations, sustaining innovations and efficiency innovations* on a *global scale* in Christensen, Raynor, McDonald (December 2015), Christensen, Denning (December 2015), Rodin (2015), Dobbs, Woetzel, Flanders (2015), Barber (2015), considering the *Apple Inc real life business case study* as an example. A *real-life business case study* represents one of possible research approaches to understand an essence of the *quantum strategy theory* in the *business administration science / the microeconomics science*. Heracleous (2013) conducted an *interesting research* on the *quantum strategy* at *Apple Inc*, in which it was suggested that the *Apple Inc* has already created and executed its *quantum strategy*. In this connection, we would like to highlight the main existing differences between the *multivector strategy* (the *multiple different strategies implementation at the selected time period*) and the *true quantum strategy* (the *most effective optimal winning virtuous organizational strategy implementation at the selected time period*), considering the *highlighted real-life business case study* on the *strategy formulation and execution* by the *interlocking interconnecting directors* in the *board of directors* in the *Apple Inc* in Heracleous (2013).

It makes sense to say that, presently, the *leading scientists* from a number of *well established/funded research institutions/universities* make everything possible to find an *answer* on the *challenging question: How can the interlocking interconnecting directors create and implement the quantum strategy, which is considered as a most effective winning virtuous organizational strategy, allowing the board of directors to build a prosperous organization with the optimal business model in the economies of the scale and scopes at the time of the great opportunities and unexpected challenges by the globalization?* There is no *simple answer* on this *particular question*. We hope that our research will greatly improve the *quantum strategy theory*, which was proposed for the first time in Ledenyov D O, Ledenyov V O (2015n), and move the *frontiers of the business administration science / the microeconomics science* forward. Therefore, completing a *short insightful introduction*, let us begin a *more detailed insightful*

discussion on the comparative analysis of the multivector strategy vs. the quantum strategy by Apple Inc, presenting our original research thoughts on the subject of scientific interest in this research article.

Multivector strategy vs quantum strategy by Apple Inc

The *board of directors in the Apple Inc* could be mathematically represented as a two dimensions matrix in Ledenyov D O, Ledenyov V O (2015b, n):

$$\mathbf{Board\ of\ Directors} = \begin{vmatrix} \mathbf{d}_{1,1} & \mathbf{d}_{1,2} & \mathbf{d}_{1,j} \\ \mathbf{d}_{2,1} & \mathbf{d}_{2,2} & \mathbf{d}_{2,j} \\ \mathbf{d}_{i,1} & \mathbf{d}_{i,2} & \mathbf{d}_{i,j} \end{vmatrix},$$

where $\mathbf{d}_{i,j}$ is the position of a director's seat in the matrix.

The *change of the composition of the board of directors in the Apple Inc* over the time could be mathematically described as an integer in Santella, Drago, Polo (November 11 2007), Ledenyov D O, Ledenyov V O (2015b, n):

$$\mathbf{board}_{c,t} = \mathbf{board}_{c,t-1} + \int_t^{t+1} (\mathbf{en} - \mathbf{ex}) dt,$$

where

$$\mathbf{en}(t) = \frac{d}{dt} \mathbf{en} \cdot t = \mathbf{en},$$

$$\mathbf{ex}(t) = \frac{d}{dt} \mathbf{ex} \cdot t = \mathbf{ex},$$

$\mathbf{en}(t)$ is the number of directors entrants at time t_i ,

$\mathbf{ex}(t)$ is the number of directors exits at time t_i ,

$\mathbf{board}_{c,t}$ is the board of directors size at time t_i ,

c is the company,

i is the director.

Let us begin our detailed insightful discussion and conduct a comparative analysis on the multivector strategy vs. the quantum strategy by Apple Inc, using the recently published research article in Heracleous (2013) and the knowledge base in Ledenyov D O, Ledenyov V O (2015b, n). We would like to provide the below citations and to consider the research ideas on the quantum strategy, focusing on the following research topics in Heracleous (2013) and discussing them in details:

1. the *research statements* on the *electron* in the *quantum mechanics* / the *quantum physics*; and
2. the *research statements* on the *quantum strategy* in the *business administration science* / the *microeconomics science*.
3. the *concluding scientific remarks* on the *subject of interest*.

Heracleous (2013) writes: “Conversely, conventional wisdom holds that a company competing on innovation, outstanding design, or service excellence will not be able to reach intense levels of efficiency, since these capabilities are costly to develop and maintain. Apple, however, has achieved both — what might be seen as the holy grail of strategy — and it is worth asking how. The answer can help us gain insight into the trickiest of strategies to execute, and one that most companies do not even try to achieve. This strategy, if successfully executed, represents a shift of the iso-value curve to the right in any industry it is employed in, not just movement along the curve where most competitors are positioned. I call this Quantum Strategy, after the idea that at the quantum level of reality, the same electron can be at two places at the same time, and two different electrons can occupy the very same physical space. Both seem to be logical and natural impossibilities, but nevertheless do occur. An understanding of Quantum Strategy offers important lessons for executives. In particular, we can understand the principles are involved in breaking the trade-offs that are conventionally assumed to constrain strategic choices and to lock firms in single generic strategies.”

As we can see, *Heracleous (2013)* made the following *two meaningless mistaken statements*, related to the *quantum physics science*:

1. “the *same electron* can be at *two places* at the *same time*, and
2. *two different electrons* can occupy the *very same physical space*.”

Going from the *quantum physics science* in *Planck (1900a, b, c, d, 1901, 1903, 1906, 1914, 1915, 1943)*, *Einstein (1905, 1917, 1924, 1935)*, *Einstein, Podolsky, Rosen (1935)*, *Bohr (1922, 1924, 1933)*, *de Broglie L (1924, 1925, 1926, 1927, 1928)*, *Compton (1926)*, *Compton A, Allison S K (1935)*, *Schrödinger (1926, 1935)*, *Schiff (1949)*, *Akhiezer, Berestetsky (1953, 1964, 1980)*, *Berestetsky, Lifshits, Pitaevsky (1980)*, *von Neumann (1955)*, *Dirac (1958)*, *Merzbacher (1961)*, *Feynman, Leighton, Sands (1965)*, *Heisenberg (1967)*, *Petersen (1968)*, *DeWitt (1970)*, *Atkins (1974, 1977, 1978)*, *Landau, Lifshits (1977)*, *Bransden, Joachain (1983)*, *Resnick, Eisberg (1985)*, *Galindo, Pascual (1990, 1991)*, *Shankar (1994)*, *Ballentine (1998)*, *Bransden, Joachain (2000)*, *Liboff (2002)*, *Abers, Pearson (2004)*, *Blokhintsev (2004)*, *Griffiths (2004)*, *Vakarchuk (2004)*, *McMahon (2006)*, *Halliday (2007)*, *Hand, Finch (2008)*, *Teschl (2009)*, *Zettili (2009)*, *Laloe (2012)*, *Papirov (2013)*, *Rylov (2015)*, we can explain that there may be the *initial*

observation stage, the *transition stage* and the *final observation stage* in the *quantum mechanics science* / the *quantum physics science*, hence:

1. In the *transition stage*, the *single electron* can be in a *superposition state*, in which the *single electron* cannot be characterized by the *certain physical parameters* in the *time – space domain*. However, the *electron* can be accurately characterized by the *momentum*, spin and *other parameters* in the *final measurement state* only;

2. In the *final observation stage*, the *two different electrons* can occupy the *very same physical space*, if they have the *different spins* only.

Speaking about the *strategies* by *Apple Inc* in *Heracleous (2013)*, it is difficult to understand: How can the *innovation strategy* by *Apple Inc* and the *efficiency strategy* by *Apple Inc* in the *strategies superposition state* in *Heracleous (2013)* relate to the *superposition state* by the *single electron* in the *quantum mechanics/the quantum physics* in *Blokhintsev (2004)*? We can hypothetically suppose that the *innovation strategy* and the *degradation strategy* can exist in the *strategies superposition state* in the *quantum econophysics science*. Also, we can hypothetically suppose that the *efficient strategy* and the *inefficient strategy* can exist in the *strategies superposition state* in the *quantum econophysics science*. However, it makes no sense to state that the *two absolutely unrelated strategies* (the *innovation strategy* by *Apple Inc* and the *efficiency strategy* by *Apple Inc*) in *Heracleous (2013)* can create a *superposition state* in the *quantum econophysics science*.

Heracleous (2013) states: “Apple has achieved its outstanding performance through effectively implementing an unconventional strategy: differentiation through innovation (along various dimensions that include serial, strategic and incremental innovation) with simultaneous intense levels of efficiency, leading to the lowest costs in its peer group. Conventional wisdom holds that such strategies would be impossible to achieve in a long-term, sustainable timeframe, because they entail mutually contradictory investments and organizational processes. ... Apple has accomplished the Quantum Strategy within the same organizational setup, skillfully integrating elements of strategy that most other companies would consider distinct; and achieved long term competitive success in the process. ... Quantum strategy has enabled Apple to achieve super-normal profits in hyper-competitive industries with thin margins.”

In our opinion, the fact that the *Apples Inc* successfully created and executed the *differentiation through innovation strategy* on *one side*, and the *cost leadership strategy* / the *efficiency strategy* on *other side* at the *same time* in *Heracleous (2013)* does not mean the *Apples Inc* successfully created and executed the *quantum strategy*. The conclusion on the *quantum*

strategy by Apples Inc in *Heracleous (2013)*, which is derived, going from the *comparative analogy* between:

1. the *successful creation and execution* of the *differentiation through innovation strategy* and the *cost leadership strategy / the efficiency strategy* by *Apple Inc*; and

2. the fact that the *two different electrons* can occupy the *very same physical space*; is dubious, because the comparison is made between:

1. the *two unrelated different strategies* on one side; and

2. the *two similar quantum objects with distinctive parameters (the two electrons with the different spins)* on other side.

In other words, the *following question* may arise: What are the *main criteria* for the *quantum strategy definition/characterization* in the *econophysics science* in *Heracleous (2013)*? As we explained early: “In the *final observation stage*, the *two different electrons* can occupy the *very same physical space*, if they have the *different spins* only.”

Therefore, making the *innovative research* on the *multivector strategy* vs. the *quantum strategy at Apple Inc*, we would like to provide a *research comment* that it is necessary to remember that the scientific term “*quantum*” in the *quantum mechanics science / the quantum physics science* has both its clear *scientific definition* and its *certain scientific meaning*; hence, we think that it would be beneficial for *Heracleous (2013)* to clearly understand the *scientific terminology* in the *quantum mechanics science / the quantum physics science*, avoiding the use of the word: “*Quantum*” in the *inappropriate cases* in the *published research article* in *Heracleous (2013)*.

Using the knowledge on the *fundamental strategy theory* in the *business administration science / the microeconomics science* in *Chandler (1962, 1998; 1977, 1993; 1994; 2001; 2005)*, *Chandler , Daems (1980)*, *Andrews (1971a, b, 1980, 1981a, b, 1984)*, *Rumelt (1974, 1982)*, *Porter (1979, 1980, 1982a, b, 1983, 1985, 1987a, b, 1991, 1994a, b, 1996a, b, 1997, 2001a, b, 2008, December 2013)*, *Porter, Harrigan (1981)*, *Porter, Salter (1982)*, *Montgomery, Porter (1991)*, *Porter, Rivkin (2000)*, *Porter, Sakakibara (2004)*, *Anand, Bradley, Ghemawat, Khanna, Montgomery, Porter, Rivkin, Rukstad, Wells, Yoffie (2005)*, *Porter, Kramer (2006)*, *Porter, Heppelmann (November 2014)*, *Schendel, Hofer (1979)*, *Yelle (1979)*, *Dess, Davis (1984)*, *Schwenk (1984)*, *Pitol-Belin (1984)*, *Hambrick (1985)*, *Palepu (1985)*, *Barney (1986, 1991)*, *Huff, Reger (1987)*, *Hill, Snell (1988)*, *Hill, Jones (1998, 2004)*, *Baysinger, Hoskisson (1989)*, *Rue, Holland (1989)*, *Fombrum, Shanley (1990)*, *Pearson (1990)*, *Ansoff (1991)*, *Goold (1991)*, *Goold, Luchs (1993)*, *Goold et al (1994)*, *Goold, Campbell (September, October 1998)*, *Alexander, Goold, Collis, Campbell, Lieberthal, Montgomery, Palepu, Prahalad, Stalk, Khanna,*

Hart, Shulman, Evans (1992, 1995, 1996, 1997, 1998, 1999), Yip (1992, 1998, 2000, 2007), Campbell et al (1995), Johnson, Scholes (1997), Johnson, Scholes, Whittington (1998), Johnson, Scholes, Whittington (2002, 2003), McKiernan (1997), Child, Faulkner (1998), Martin (1998-1999, 2004, 2005-2006, 2007a,b, 2008, 2009), Moldoveanu, Martin (2001), Lafley, Martin (2013), Shiryaev (1999), Laffont, Tirole (1999), Grant (2001), Welch (2001a, b), Choo, Bontis (2002), Drejer (2002), Sadler (2003), Gavetti, Levinthal (2004), Gavetti, Rivkin (2007), Roney (2004), Thietart, Xuereb (2005), Godard (2006), Ireland, Hoskisson, Hitt (2006), Hitt, Ireland, Hoskisson (2007), Lorino, Tarondeau (2006), Besanko, Shanley, Dranove (2007), Sull (2007a, b, c, d, 2008), Teece, Winter (2007), Samuels (2008), Chamberlain (2010), Holt, Cameron (2010), Ledenyov D O, Ledenyov V O (2015b, n), ***we would like to point out to the fact that the creation and implementation of the two different corporate strategies at Apple Inc at the same time in Heracleous (2013) has to be scientifically qualified as the creation and implementation of the multiple different corporate strategies at Apple Inc at the same time, in other words, we have the case of the creation and implementation of the multivector strategy by the Apple Inc at the selected time period.*** The *multivector strategy* is well studied in the frames of the *fundamental strategy theory* in the *business administration science / the microeconomics science*.

The ***quantum strategy*** as a *new research topic* in the *business administration science / the microeconomics science* has been introduced for the *first time* in Ledenyov D O, Ledenyov V O (2015n). In our opinion, the *quantum strategy* in the *business administration science / the microeconomics science* must be accurately characterized by the *quantum mechanics/quantum physics sciences principles*.

The new ***Quantum Strategy Creation Algorithm*** in Ledenyov D O, Ledenyov V O (2015n) has been proposed to complement the ***Modern Strategy Creation Algorithm*** in Ledenyov D O, Ledenyov V O (2015b): ***“The Quantum Strategy Creation Algorithm: The Ledenyov theory postulates that the director with the highest information absorption capacity, who experience the phenomenon of resonant - type absorption of information, is able to create the winning virtuous strategies through the decision making process on the available business choices in the diffusion - type financial economic system with the induced nonlinearities, applying the econophysical econometrical analysis techniques in Schumpeter (1906, 1933), Bowley (1924), Box, Jenkins (1970), Grangel, Newbold (1977), Van Horne (1984), Taylor S (1986), Tong (1986, 1990), Judge, Hill, Griffiths, Lee, Lutkepol (1988), Hardle (1990), Grangel, Teräsvirta (1993), Pesaran, Potter (1993), Banerjee, Dolado, Galbraith, Hendry (1993), Hamilton (1994), Karatzas, Shreve (1995), Campbell, Lo, MacKinlay (1997), Rogers, Talay (1997), Hayashi (2000), Durbin, Koopman (2000, 2002, 2012), Ilinski (2001), Greene***

(2003), Koop (2003), Davidson, MacKinnon (2004), Campbell, Lo, MacKinlay (1996), Vialar, Goergen (2009) and using the creative imperative integrative intelligent conceptual co-lateral adaptive logarithmic thinking process with the application of the quantum logic above the inductive, deductive and abductive logics in Martin (1998-1999, 2005-2006) in the frames of the strategic choice structuring process, that is the winning through the distinctive choices process, in Porter (1979, 1980, 1982a, b, 1983, 1985, 1987a, b, 1991, 1994a, b, 1996a, b, 1997, 2001a, b, 2008, 2013), Porter, Harrigan (1981), Porter, Salter (1982), Montgomery, Porter (1991), Porter, Rivkin (2000), Porter, Sakakibara (2004), Anand, Bradley, Ghemawat, Khanna, Montgomery, Porter, Rivkin, Rukstad, Wells, Yoffie (2005), Porter, Kramer (2006), Hill, Jones (1998, 2004), Martin (1998-1999b, 2004, 2005-2006a, b, 2009), Moldoveanu, Martin (2001), Lafley, Martin (2013), Grant (2001), Choo, Bontis (2002), Drejer (2002), Sadler (2003), Roney (2004), Ireland, Hoskisson, Hitt (2006), Besanko, Shanley, Dranove (2007), Hitt, Ireland, Hoskisson (2007), Gavetti, Rivkin (2007), Teece, Winter (2007), aiming both to get an increased business valuation (a return premium) and to make a positive social impact in the local community and society in the frames of the socially responsible investment (SRI) process that integrates social, environmental, and ethical considerations into the investment decision making in the real sector of economy in Waddock, Graves, (1994), Arora, Gangopadhyay (1995), Sparkes (1998, 2004, 2008), Johnson, Greening (1999), Lydenburg (2002), Cox, Brammer, Millington (2004), Kotler, Lee (2005), Louche, Lydenberg (2006), McWilliams, Siegel, Wright (2006), Scholtens (2006), Cespa, Cestone (2007), Cumming, Johan (2007), Williams (2007), Hull, Rothenberg (2008), Reinhardt, Stavins, Vietor (2008), Renneboog, Horst, Zhang (2008), Arjalies (2010), Crifo, Mottis (2010), Morrell, Clark (2010), Baron, Harjoto, Jo (2011), Crifo, Forget (February, 2012).

We would like to illustrate the distinctions between the *quantum logic* (the *probability logic*) and the *inductive, deductive and abductive logics* (the *value based logic*, the *binary logic*) as in Ledenyov D O, Ledenyov V O (2015n):

I. “We can illustrate the *probability logic*, by using the *quantum mechanics* and by saying that the *probability* that the *Schrödinger cat* may be *alive* or *dead* (the *two possible choices*) in the *superposition state* in the *observable closed box* is 50% until the *moment of the measurement* in *Schrödinger (1935)*. In other words, the *interlocking interconnecting director* in the *board of directors* in the *organization* must consider the *probabilities distribution* of the *various events*, related to the *particular business matter / situation*, before the *moment of the creation* of the *quantum business strategy*.

2. We can describe the *value based logic* by referring to the *inductive, deductive and abductive logics* and by showing that it operates with / converges to the values: *Yes* and/or *No*, hence it has some similarity with the *binary logic: 1* and/or *0*. It means that, the *interlocking interconnecting director* in the *board of directors* in the *organization* must *inductively / deductively / abductively* come to the conclusion: *Yes* and/or *No*, related to *the particular business matter / situation*, before the moment of the creation of the *usual business strategy*.”

We can also demonstrate the *quantum logic* (the *probability logic*), using the practical example of the *quantum random number generator on the magnetic flux qubits* chipset in *Ledenyov V O, Ledenyov O P, Ledenyov D O (2002)* in analogy with the *Schrödinger wave function / Schrödinger cat representation* in *Schrödinger (1935)*. For example, the *special entanglement* of the *qubits*, with the *probability* of 50% that *any particular qubit* exists in a *superposition state* of being *0* and being *1*, can be achieved in the *quantum random number generator on the magnetic flux qubits* chipset in *Ledenyov V O, Ledenyov O P, Ledenyov D O (2002)*.

In the *business administration science / the microeconomics science*, we would like to make a *few empirical research comments* that the *practical creation and implementation* of the ***Quantum Strategy Creation Algorithm*** can be realized by the *interlocking interconnecting directors* in the *board of directors* in the *modern organization* at the *time of the global integration/disintegration* in agreement with the use of the *following simplified scheme* in *Ledenyov D O, Ledenyov V O (2015n)*:

1. the *interlocking interconnecting director* uses the *inductive, deductive and abductive logics* (the *value based logic, the binary logic*) to come to a certain *logical conclusion* on the *desirable corporate strategy of the choice*, and then

2. the *interlocking interconnecting director* applies the *quantum logic* (the *probability logic*) to evaluate the *corporate strategy of the choice*, with the *ultimate purpose* to create the *quantum strategy* or to disregard the *corporate strategy of the choice* as explained before.

Going from the *true meaning of the quantum strategy* in *Ledenyov D O, Ledenyov V O (2015n)*, we can assume that the *Apple Inc* had been able to create and implement its *quantum strategy*, primarily based on the *quantum leap* in the innovative design and advanced technology applications, to outperform the *competitors* in the *global markets* of the *wireless computing devices, the laptop computers, the electronic timepieces* and the operating systems at the *certain time periods*, however we propose to clearly distinguish the *multivector strategy* by *Apply Inc* in

Heracleous (2013) from the true quantum strategy by Apply Inc in Ledenyov D O, Ledenyov V O (2015n).

The authors' strategic vision is that the interlinking interlocking directors in the boards of directors in the complex organizations will greatly benefit by creating and by implementing the quantum strategies, pursuing the ultimate goal to build the prosperous organizations at the time of the disruptive changes and opportunities by the globalization.

Conclusion

In an information century, the leading states create the quantum devices/technologies development roadmaps, trying to predict/outline/evaluate the future progress in the quantum devices/technologies development for the years to come. The progress in the quantum devices/technologies development depends on the state of matters in the natural sciences (the physics, chemistry, mathematics sciences) as well as the hi-tech industries (the electronics, computer, materials processing industries) in the economy of the scale and scope. In this connection, the innovative research on the application of the scientific principles in the quantum mechanics science / the quantum econophysics science with the aim to understand and to accurately characterize the business strategies by the interlocking interconnecting directors in the board of directors in the modern firms looks very attractive from the scientific point of view.

We proposed that the quantum strategy can be considered as a most effective winning virtuous organizational strategy, allowing the board of directors to build a prosperous organization with the optimal business model in the economies of the scale and scopes at the time of the great opportunities and unexpected challenges by the globalization.

We provided a concise definition on the quantum strategy: *The organizational strategy, which can be derived with the use of the quantum strategy search algorithm by the interlocking interconnecting directors in the board of directors in the modern organization at the time of the increasing global integration.*

We demonstrated that the quantum strategy search algorithm applies the quantum logic (the probabilistic logic) on the top of the inductive, deductive and abductive logics (the value based logics), aiming to create the most effective optimal winning virtuous organizational strategy by the interlocking interconnecting directors in the board of directors in the modern organization in the information century.

We highlighted the main existing differences between the multivector strategy (the multiple different strategies implementation at the selected time period) and the quantum

strategy (the most effective optimal winning virtuous organizational strategy implementation at the selected time period), considering the real-life case study on the strategy formulation and execution by the interlocking interconnecting directors in the board of directors in the Apple Inc.

We expressed a *research opinion* that the *quantum strategy* can be clearly defined /distinguished in line with the *generally accepted scientific definitions/meanings/principles* in the *quantum mechanics science*.

We think that the *interlinking interlocking directors* in the *boards of directors* in the *prosperous organizations* will continue to create and implement the *quantum strategies* to *increase their valuations* and *outperform the competitors* in the *economies of the scales and scopes* at the *time of globalization*.

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References:

Economics Science, Finance Science, Economic History Science:

1. Joseph Penso de la Vega 1668, 1996 *Confusión de Confusiones* re-published by *John Wiley and Sons Inc* USA.
2. Mortimer Th 1765 *Every man his own broker 4th edition* London UK.
3. Smith A 1776, 2008 *An inquiry into the nature and causes of the wealth of nations* *W Strahan and T Cadell* London UK, A Selected Edition edited by Kathryn Sutherland *Oxford Paperbacks* Oxford UK.
4. Marx K 1867 *Capital, Volume 1*.
5. Marx K July, 1893 *Capital, Volume 2: The process of circulation of capital* *Engels publisher*.
6. Marx K October, 1994 *Capital, Volume 3: The process of capitalist production as a whole* *Engels publisher*.
7. Menger C 1871 *Principles of Economics (Grundsätze der Volkswirtschaftslehre)* *Ludwig von Mises Institute* Auburn Alabama USA
<http://www.mises.org/etexts/menger/Mengerprinciples.pdf> .
8. Bagehot W 1873, 1897 *Lombard Street: A description of the money market* *Charles Scribner's Sons* New York USA.
9. George H 1879, 1881, 2009 *Progress and poverty: An inquiry into the cause of industrial depressions and of increase of want with increase of wealth; The remedy* *Kegan Paul* USA, *Cambridge University Press* UK ISBN 978-1-108-00361-2.
10. von Böhm-Bawerk E 1884, 1889, 1921 *Capital and interest: History and critique of interest theories, positive theory of capital, further essays on capital and interest* Austria; 1890 *Macmillan and Co* Smart W A (translator) London UK
http://files.libertyfund.org/files/284/0188_Bk.pdf .
11. Hirsch M 1896 *Economic principles: A manual of political economy* *The Russkin Press Pty Ltd* 123 Latrobe Street Melbourne Australia.
12. Bachelier L 1900 *Theorie de la speculation* *Annales de l'Ecole Normale Supérieure* Paris France vol 17 pp 21 – 86.
13. Schumpeter J A 1906 *Über die mathematische methode der theoretischen ökonomie* *ZfVSV* Austria.
14. Schumpeter J A 1933 *The common sense of econometrics* *Econometrica*.
15. Schumpeter J A 1911; 1939, 1961 *Theorie der wirtschaftlichen entwicklung; The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle* Redvers Opie (translator) *OUP* New York USA.

16. Schumpeter J A 1939 Business cycle *McGraw-Hill* New York USA.
17. Schumpeter J A 1947 The creative response in economic history *Journal of Economic History* vol 7 pp 149 – 159.
18. Slutsky E E 1910 Theory of marginal utility *M Sc Thesis* Vernadsky National Library Kiev Ukraine.
19. Slutsky E E 1915 Sulla teoria sel bilancio del consumatore *Giornale degli economisti e rivista di statistica* 51 no 1 pp 1 – 26 Italy.
20. Slutsky E E 1923 On calculation of state revenue from emission of paper money *Local Economy* 2 pp 39 – 62 Kiev Ukraine.
21. von Mises L 1912 The theory of money and credit *Ludwig von Mises Institute* Auburn Alabama USA
http://mises.org/books/Theory_Money_Credit/Contents.aspx .
22. Hayek F A 1931, 1935, 2008 Prices and production 1st edition *Routledge and Sons* London UK, 2nd edition *Routledge and Kegan Paul* London UK, 2008 edition Ludwig von Mises Institute Auburn Alabama USA.
23. Hayek F A 1945 The use of knowledge in society *American Economic Review* 35 pp 519 – 530.
24. Hayek F A 1948, 1980 Individualism and economic order *London School of Economics and Political Science* London UK, *University of Chicago Press* Chicago USA.
25. Keynes J M 1936 The general theory of employment, interest and money *Macmillan Cambridge University Press* Cambridge UK.
26. Keynes J M 1998 The collected writings of John Maynard Keynes *Cambridge University Press* Cambridge UK ISBN 978-0-521-30766-6.
27. Ellis H, Metzler L (editors) 1949 Readings in the theory of international trade *Blakiston* Philadelphia USA.
28. Friedman M (editor) 1953 Essays in positive economics *Chicago University Press* Chicago USA.
29. Friedman 1976 Nobel Prize in Economics Stockholm Sweden.
30. Baumol W 1957 Speculation, profitability, and stability *Review of Economics and Statistics* 39 pp 263 – 271.
31. Debreu G 1959 Theory of value *Cowles Foundation Monograph* vol 17 *John Wiley & Sons Inc* New York USA.
32. Minsky H P 1974 The modeling of financial instability: An introduction *Modeling and Simulation* Proceedings of the Fifth Annual Pittsburgh Conference 5.

33. Minsky H P May 1992 The financial instability hypothesis *Working Paper no 74*: 6–8
<http://www.levy.org/pubs/wp74.pdf> .
 34. Minsky H P 2015 Minsky archive *The Levy Economics Institute of Bard College* Blithewood Bard College Annandale-on-Hudson New York USA
<http://www.bard.edu/library/archive/minsky/> .
 35. Stigler G J 1982 Nobel Prize in Economics Stockholm Sweden.
 36. Stigler G J 1988 Chicago studies in political economy *University of Chicago Press* Chicago USA ISBN 0-226-77437-6.
 37. Coase 1991 Nobel Prize in Economics Stockholm Sweden.
 38. Becker 1992 Nobel Prize in Economics Stockholm Sweden.
 39. Fogel 1993 Nobel Prize in Economics Stockholm Sweden.
 40. Lucas 1995 Nobel Prize in Economics Stockholm Sweden.
 41. Scornick-Gerstein F May, 1996 Private communications on land value taxation theory by Henry George *Royal Automobile Club* London UK.
 42. Scornick-Gerstein F 1999 The future of taxation: The failure of the poll tax in the UK ISBN: 9781902250007.
 43. Landes D 1998, 1998, 1999 The wealth and poverty of nations *W W Norton & Company Inc*; Little , Brown and Company; Abacus ISBN 0 34911166 9 pp 1 – 650.
 44. Krugman P, Wells R 2005 Economics *Worth Publishers* 1st edition ISBN-10: 1572591501 ISBN-13: 978-1572591509 pp 1 – 1200.
 45. Stiglitz J E 2005 Principles of macroeconomics *W W Norton* 4th edition ISBN-10: 0393926249 ISBN-13: 978-0393926248 pp 1 – 526.
 46. Stiglitz J E 2015 The great divide *Public Lecture on 19.05.2015* London School of Economics and Political Science London UK
http://media.rawvoice.com/lse_publiclecturesandevents/richmedia.lse.ac.uk/publiclecturesandevents/20150519_1830_greatDivide.mp4 .
 47. Fama 2013 Nobel Prize in Economics Stockholm Sweden.
 48. Hansen 2013 Nobel Prize in Economics Stockholm Sweden.
 49. Dodd N 2014 The social life of money *Princeton University Press* NJ USA ISBN: 9780691141428 pp 1 – 456.
- Juglar Economic Cycle in Macroeconomics:**
50. Juglar C 1862 Des crises commerciales et de leur retour périodique en France en Angleterre et aux États-Unis *Guillaumin* Paris France.
 51. Schumpeter J A 1939 Business cycle *McGraw-Hill* New York USA.

52. Grinin L E, Korotayev A V, Malkov S Y 2010 A mathematical model of Juglar cycles and the current global crisis in *History & Mathematics* Grinin L, Korotayev A, Tausch A (editors) URSS Moscow Russian Federation.

Kondratiev Economic Cycle in Macroeconomics:

53. Tugan-Baranovsky M 1894 Industrial crises in contemporary England: Their causes and influences on the life of the people *St Petersburg/Moscow* Russian Federation.

54. Kondratieff N D 1922 The world economy and its trends during and after war *Regional branch of state publishing house* Vologda Russian Federation.

55. Kondratiev N D 1923 Mikhail Tugan-Baranovsky *St Petersburg* Russian Federation pp 1 – 115.

56. Kondratieff N D 1925 The big cycles of conjuncture *The problems of conjuncture* **1** (1) pp 28 – 79.

57. Kondratieff N D 1926 Die langen wellen der konjunktur *Archiv fuer Sozialwissenschaft und Sozialpolitik* **56** (3) pp 573 – 609.

58. Kondratieff N D 1928 The big cycles of conjuncture *Institute of Economics RANION* Moscow Russian Federation.

59. Kondratieff N D, Stolper W F 1935 The long waves in economic life *Review of Economics and Statistics The MIT Press* **17** (6) pp 105 – 115 doi:10.2307/1928486 JSTOR 1928486.

60. Kondratieff N D 1984 The Long wave cycle *Richardson & Snyder* New York USA.

61. Kondratieff N D 2002 The big cycles of conjuncture and theory of forecast *Economics* Moscow Russian Federation.

62. Garvy G 1943 Kondratieff's theory of long cycles *Review of Economic Statistics* **25** (4) pp 203 – 220.

63. Silberling N J 1943 The dynamics of business: An analysis of trends, cycles, and time relationships in American economic activity since 1700 and their bearing upon governmental and business policy *McGraw-Hill* New York USA.

64. Kowal L 1973 The market and business cycle theories of M I Tugan-Baranovsky *Revista Internazionale di Scienze Economiche e Commercial* vol **20** part 4 Padova Italy.

65. Rostow W W 1975 Kondratieff, Schumpeter and Kuznets: Trend periods revisited *Journal of Economic History* **25** (4) pp 719 – 753.

66. Forrester J W 1978 Innovation and the economic long wave *MIT System Dynamics Group Working Paper* Massachusetts Institute of Technology Cambridge USA.

67. Forrester J W 1981 The Kondratieff cycle and changing economic conditions *MIT System Dynamics Group Working Paper* Massachusetts Institute of Technology Cambridge USA.

68. Forrester J W 1985 Economic conditions ahead: Understanding the Kondratieff wave *Futurist* **19** (3) pp 16 – 20.
69. Kuczynski Th 1978 Spectral analysis and cluster analysis as mathematical methods for the periodization of historical processes: Kondratieff cycles – Appearance or reality? *Proceedings of the Seventh International Economic History Congress* vol **2** International Economic History Congress Edinburgh UK pp 79–86.
70. Kuczynski Th 1982 Leads and lags in an escalation model of capitalist development: Kondratieff cycles reconsidered *Proceedings of the Eighth International Economic History Congress* vol **B3** International Economic History Congress Budapest Hungary pp 27.
71. Barr K 1979 Long waves: A selective annotated bibliography *Review* **2** (4) pp 675 – 718.
72. Van Duijn J J 1979 The long wave in economic life *De Economist* **125** (4) pp 544 – 576.
73. Van Duijn J J 1981 Fluctuations in innovations over time *Futures* **13**(4) pp 264 – 275.
74. Van Duijn J J 1983 The long wave in economic life *Allen and Unwin* Boston MA USA.
75. Eklund K 1980 Long waves in the development of capitalism? *Kyklos* **33** (3) pp 383 – 419.
76. Mandel E 1980 Long waves of capitalist development *Cambridge University Press* Cambridge UK.
77. Van der Zwan A 1980 On the assessment of the Kondratieff cycle and related issues in *Prospects of Economic Growth* Kuipers S K, Lanjouw G J (editors) North-Holland Oxford UK pp 183 – 222.
78. Tinbergen J 1981 Kondratiev cycles and so-called long waves: The early research *Futures* **13** (4) pp 258 – 263.
79. Van Ewijk C 1982 A spectral analysis of the Kondratieff cycle *Kyklos* **35** (3) pp 468 – 499.
80. Cleary M N, Hobbs G D 1983 The fifty year cycle: A look at the empirical evidence in *Long Waves in the World Economy* Freeman Chr (editor) *Butterworth* London UK pp 164 – 182.
81. Glismann H H, Rodemer H, Wolter W 1983 Long waves in economic development: Causes and empirical evidence in *Long Waves in the World Economy* Freeman Chr (editor) *Butterworth* London UK pp 135 – 163.
82. Bieshaar H, Kleinknecht A 1984 Kondratieff long waves in aggregate output? An econometric test *Konjunkturpolitik* **30** (5) pp 279 – 303.
83. Wallerstein I 1984 Economic cycles and socialist policies *Futures* **16** (6) pp 579 – 585.

84. Zarnowitz V 1985 Recent work on business cycles in historical perspective: Review of theories and evidence *Journal of Economic Literature* **23** (2) pp 523 – 580.
85. Summers L H 1986 Some skeptical observations on real business cycle theory *Federal Reserve Bank of Minneapolis Quarterly Review* **10** pp 23 – 27.
86. Freeman C 1987 Technical innovation, diffusion, and long cycles of economic development in *The long-wave debate* Vasko T (editor) *Springer* Berlin Germany pp 295–309.
87. Freeman C, Louçã F 2001 As time goes by: From the industrial revolutions to the information revolution *Oxford University Press* Oxford UK.
88. Goldstein J 1988 Long cycles: Prosperity and war in the modern age *Yale University Press* New Haven CT USA.
89. Solomou S 1989 Phases of economic growth, 1850–1973: Kondratieff waves and Kuznets swings *Cambridge University Press* Cambridge UK.
90. Berry B J L 1991 Long wave rhythms in economic development and political behavior *Johns Hopkins University Press* Baltimore MD USA.
91. Metz R 1992 Re-examination of long waves in aggregate production series *New Findings in Long Wave Research* Kleinknecht A, Mandel E, Wallerstein I (editors) *St. Martin's* New York USA pp 80 – 119.
92. Metz R 1998 Langfristige wachstumsschwankungen – Trends, zyklen, strukturbrüche oder zufall Kondratieffs *Zyklen der Wirtschaft. An der Schwelle neuer Vollbeschäftigung?* Thomas H, Nefiodow L A, Herford (editors) pp 283 – 307.
93. Metz R 2006 Empirical evidence and causation of Kondratieff cycles *Kondratieff Waves, Warfare and World Security* Devezas T C (editor) *IOS Press* Amsterdam The Netherlands pp 91 – 99.
94. Tylecote A 1992 The long wave in the world economy *Routledge* London UK.
95. Cooley Th (editor) 1995 Frontiers of business cycle research *Princeton University Press* USA ISBN 0-691-04323-X.
96. Modelski G, Thompson W R 1996 Leading sectors and world politics: The co-evolution of global politics and economics *University of South Carolina Press* Columbia SC USA.
97. Modelski G 2001 What causes K-waves? *Technological Forecasting and Social Change* **68** pp 75 – 80.
98. Modelski G 2006 Global political evolution, long cycles, and K-waves *Kondratieff Waves, Warfare and World Security* Devezas T C (editor) *IOS Press* Amsterdam The Netherlands pp 293 – 302.

99. Barnett V December 2001 Tugan-Baranovsky as a pioneer of trade cycle analysis *Journal of the History of Economic Thought* vol **23** no 4 pp 443 – 466.
100. Perez C 2002 Technological revolutions and financial capital – The dynamics of bubbles and golden ages *Edward Elgar* Cheltenham UK.
101. Rennstich J K 2002 The new economy, the leadership long cycle and the nineteenth K-wave *Review of International Political Economy* **9** pp 150 – 182.
102. Rummyantseva S Yu 2003 Long waves in economics: Multifactor analysis *St. Petersburg University Publishing House* St. Petersburg Russian Federation.
103. Diebolt C, Doliger C 2006 Economic cycles under test: A spectral analysis in *Kondratieff Waves, Warfare and World Security* Devezas T C (editor) *IOS Press* Amsterdam The Netherlands pp 39 – 47.
104. Linstone H A 2006 The information and molecular ages: Will K-waves persist? *Kondratieff Waves, Warfare and World Security* edited by Devezas T C *IOS Press* Amsterdam The Netherlands pp 260 – 269.
105. Thompson W 2007 The Kondratieff wave as global social process in *World System History, Encyclopedia of Life Support Systems* Modelski G (editor) *EOLSS Publishers* Oxford UK
<http://www.eolss.net>.
106. Papenhausen Ch 2008 Causal mechanisms of long waves *Futures* **40** pp 788 – 794.
107. Korotayev A V, Tsirel S V 2010 A spectral analysis of world GDP dynamics: Kondratieff waves, Kuznets swings, Juglar and Kitchin cycles in global economic development, and the 2008–2009 economic crisis *Structure and Dynamics* vol **4** issue 1 pp 1 – 55
<http://www.escholarship.org/uc/item/9jv108xp> .
108. Wikipedia 2015a Kondratieff *Wikipedia* USA
www.wikipedia.org.

Kitchin Economic Cycle in Macroeconomics:

109. Kitchin J 1923 Cycles and trends in economic factors *Review of Economics and Statistics* *The MIT Press* **5** (1) pp 10 – 16 doi:10.2307/1927031 JSTOR 1927031.

Kuznets Economic Cycle in Macroeconomics:

110. Kuznets S 1924 Economic system of Dr. Schumpeter *M. Sc. Thesis under Prof. Wesley Clair Mitchell* Columbia University NY USA.
111. Kuznets S 1930 Secular movements in production and prices *Ph. D. Thesis under Prof. Wesley Clair Mitchell* Columbia University NY USA.

- 112.** Kuznets S 1930 Secular movements in production and prices. Their nature and their bearing upon cyclical fluctuations *Houghton Mifflin* Boston USA.
- 113.** Kuznets S 1937 National income and capital formation, 1919 – 1935.
- 114.** Kuznets S 1941 National income and its composition, 1919 – 1938.
- 115.** Kuznets S March 1955 Economic growth and income inequality *American Economic Review* **45** pp 1 – 28.
- 116.** Kuznets S 1963 Quantitative aspects of the economic growth of nations, VIII: The distribution of income by size *Economic Development and Cultural Change* **11** pp 1 – 92.
- 117.** Kuznets S 1966 Modern economic growth: Rate, structure, and spread.
- 118.** Kuznets S 1968 Toward a theory of economic growth, with reflections on the economic growth of modern nations.
- 119.** Kuznets S 1971 Economic growth of nations: Total output and production structure.
- 120.** Kuznets S 1973a Population, capital and growth.
- 121.** Kuznets S 1973b Modern economic growth: Findings and reflections *American Economic Review* **63** pp 247 – 58.
- 122.** Abramovitz M 1961 The nature and significance of Kuznets cycles *Economic Development and Cultural Change* **9** (3) pp 225 – 248.
- 123.** Abramovitz M March 1986 Simon Kuznets (1901 – 1985) *The Journal of Economic History* vol **46** no 1 pp 241 – 246.
- 124.** Lundberg E 1971 Simon Kuznets contributions to economics *The Swedish Journal of Economics* **73** (4) pp 444 – 459 DOI:10.2307/3439225, JSTOR 3439225.
- 125.** Hozelitz B F January 1983 Bibliography of Simon Kuznets *Economic Development and Cultural Change* vol **31** no 2 pp 433 – 454.
- 126.** Ben-Porath Y April 1988 Simon Kuznets in person and in writing *Economic Development and Cultural Change* vol **36** no 3 pp 435 – 447.
- 127.** Street J H June 1988 The contribution of Simon S. Kuznets to institutionalist development theory *Journal Economic Issues* vol **22** no 2 pp 499 – 509.
- 128.** Kapuria-Foreman V, Perlman M November 1995 An economic historian's economist: Remembering Simon Kuznets *The Economic Journal* **105** pp 1524 – 1547.
- 129.** Fogel R W 2000 Simon S. Kuznets: April 30, 1901 – July 9, 1985 *NBER Working Paper no W7787* NBER USA.
- 130.** Fogel R W, Fogel E M, Guglielmo M, Grotte N 2013 Political arithmetic: Simon Kuznets and the empirical tradition in economics *University of Chicago Press* Chicago USA ISBN 0-226-25661-8.

131. Syed M K, Mohammad M J 2004 Revisiting Kuznets hypothesis: An analysis with time series and panel data *Bangladesh Development Studies* **30** (3-4) pp 89 – 112.
132. Diebolt C, Doliger C 2008 New international evidence on the cyclical behaviour of output: Kuznets swings reconsidered. Quality & quantity. *International Journal of Methodology* **42** (6) pp 719 – 737.
133. Wikipedia 2015b Simon Kuznets Economist *Wikipedia* USA
www.wikipedia.org.

Accurate Characterization of Properties of Economic Cycles in Macroeconomics:

134. George H 1881, 2009 Progress and poverty *Kegan Paul* USA; reissued by *Cambridge University Press* Cambridge UK ISBN 978-1-108-00361-2.
135. Schumpeter J A 1939 Business cycle *McGraw-Hill* New York USA.
136. Burns A F, Mitchell W C 1946 Measuring business cycles *National Bureau of Economic Research* New York USA.
137. Dupriez L H 1947 Des mouvements économiques généraux vol 2 pt 3 *Institut de Recherches Economiques et Sociales de l'Université de Louvain* Belgium.
138. Samuelson P A 1947 Foundations of economic analysis *Harvard University Press* Cambridge MA USA.
139. Hicks J R 1950 A contribution to the theory of the trade cycle *Oxford University Press* Oxford UK.
140. Goodwin R M 1951 The nonlinear accelerator and persistence of business cycles *Econometrica* **19** no 1 pp 1 – 17.
141. Inada K, Uzawa H 1972 Economical development and fluctuations *Iwanami* Tokyo Japan.
142. Bernanke B S 1979 Long-term commitments, dynamic optimization, and the business cycle *Ph. D. Thesis* Department of Economics Massachusetts Institute of Technology USA.
143. Marchetti C 1980 Society as a learning system: Discovery, invention, and innovations cycles revisited *Technological Forecast and Social Change* **18** pp 257 – 282.
144. Kleinknecht A 1981 Innovation, accumulation, and crisis: Waves in economic development? *Review* **4** (4) pp 683 – 711.
145. Dickson D 1983 Technology and cycles of boom and bust *Science* **219** (4587) pp 933 – 936.
146. Hodrick R J, Prescott E C 1997 Postwar U.S. business cycles: An empirical investigation *Journal of Money, Credit, and Banking* vol **29** no 1 pp 1 – 16.

147. Anderson H M, Ramsey J B 1999 *Economic Research Reports PR # 99-01* New York University NY USA.
148. Baxter M, King R G 1999 Measuring business cycles: Approximate band-pass filters for economic time series *Review of Economics and Statistics* **81** (4) pp 575 – 593.
149. Kim Ch-J, Nelson Ch 1999 Has the U.S. economy become more stable? A Bayesian approach based on a Markov-switching model of the business cycle *Review of Economics and Statistics*.
150. McConnell M, Pérez-Quirós G 2000 Output fluctuations in the United States: What has changed since the early 1980s? *American Economic Review*.
151. Devezas T C, Corredine J T 2001 The biological determinants of long-wave behavior in socioeconomic growth and development *Technological Forecasting & Social Change* **68** pp 1 – 57.
152. Devezas T C, Corredine J T 2002 The nonlinear dynamics of technoeconomic systems. An informational interpretation *Technological Forecasting & Social Change* **69** pp 317 – 357.
153. Devezas T C (editor) 2006 *Kondratieff Waves, Warfare and World Security* IOS Press Amsterdam The Netherlands.
154. Arnord L 2002 Business cycle theory *Oxford University Press* Oxford UK 2002.
155. Stock J, Watson M 2002 Has the business cycle changed and why? *NBER Macroeconomics Annual* NBER USA.
156. Helfat C E, Peteraf M A 2003 The dynamic resource-based view: Capability life cycles *Strategic Management Journal* **24** (10) pp 997 – 1010.
157. Selover D D, Jensen R V, Kroll J 2003 *Studies in Nonlinear Dynamics & Econometrics* **7** p 1.
158. Sussmuth B 2003 Business cycles in the contemporary World *Springer* Berlin Heidelberg Germany.
159. Hirooka M 2006 Innovation dynamism and economic growth: A nonlinear perspective *Edward Elgar* Cheltenham UK Northampton MA USA.
160. Kleinknecht A, Van der Panne G 2006 Who was right? Kuznets in 1930 or Schumpeter in 1939? in *Kondratieff Waves, Warfare and World Security* Devezas T C (editor) *IOS Press* Amsterdam The Netherlands pp 118 – 127.
161. Iyetomi H, Aoyama H, Ikeda Y, Souma W, Fujiwara Y 2008 *Econophysics* *Kyoritsu Shuppan* Tokyo Japan.

- 162.** Iyetomi H, Nakayama Y, Yoshikawa H, Aoyama H, Fujiwara Y, Ikeda Y, Souma W 2011 What causes business cycles? Analysis of the Japanese industrial production data *Journal of the Japanese and International Economies* **25** (3) pp 246 – 272.
- 163.** Iyetomi H, Aoyama H, Fujiwara Y, Sato A-H (editors) 2012 Econophysics 2011 - The Hitchhiker's guide to the economy *Proceedings of the YITP Workshop on Econophysics Japan Progress of Theoretical Physics Supplement* no 194.
- 164.** Jourdon Ph 2008 La monnaie unique Europeenne et son lien au developpement economique et social coordonne: une analyse cliometrique *Thèse Universite Montpellier* France.
- 165.** Taniguchi M, Bando M, Nakayama A 2008 Business cycle and conserved quantity in economics *Journal of the Physical Society of Japan* vol **77** no 11.
- 166.** Drehmann M, Borio C, Tsatsaronis K 2011 Anchoring countercyclical capital buffers: The role of credit aggregates *International Journal of Central Banking* vol **7** no 4 pp 189 – 240.
- 167.** Ikeda Y, Aoyama H, Fujiwara Y, Iyetomi H, Ogimoto K, Souma W, Yoshikawa H 2012 Coupled oscillator model of the business cycle with fluctuating goods markets *Proceedings of the YITP Workshop on Econophysics Japan Progress of Theoretical Physics Supplement* no 194 pp 111 – 121.
arXiv:1110.6679v1 .
- 168.** Ikeda Y, Aoyama H, Yoshikawa H 2013a Synchronization and the coupled oscillator model in international business cycles *RIETI Discussion Paper October 13-E-089* The Research Institute of Economy, Trade and Industry Japan
<http://www.rieti.go.jp/en/> .
- 169.** Ikeda Y, Aoyama H, Yoshikawa H 2013b Direct evidence for synchronization in international business cycles *Financial Networks and Systemic Risk*.
- 170.** Ikeda Y 2013 Direct evidence for synchronization in Japanese business cycles *Evolutionary and Institutional Economic Review* **10** (2) pp 1 – 13
arXiv:1305.2263v1 .
- 171.** Swiss National Bank 2012 Swiss National Bank financial stability report 2012
http://www.snb.ch/en/mmr/reference/stabrep_2012/source/stabrep_2012.en.pdf .
- 172.** Swiss National Bank 2013 Countercyclical capital buffer: Proposal of the Swiss National Bank and decision of the Federal Council
http://www.snb.ch/en/mmr/reference/pre_20130213/source/pre_20130213.en.pdf .

173. Uechi L, Akutsu T 2012 Conservation laws and symmetries in competitive systems
Progress of Theoretical Physics Supplement no 194 pp 210 – 222.
174. Central Banking Newsdesk 2013 Swiss board member supports counter-cyclical capital buffer
<http://www.centralbanking.com/central-banking/speech/2203857/swiss-board-member-supportscountercyclical-capital-buffer> .
175. Union Bank of Switzerland 2013 UBS outlook Switzerland
http://www.ubs.com/global/en/wealth_management/wealth_management_research/ubs_outlook_ch.html .
176. Da Costa 2015 Weak first-quarter growth due to seasonal issues after all, SF Fed says
The Wall Street Journal New York USA.
177. Federal Reserve Bank of St Louis 2015 US Federal Reserve Economic Data (FRED)
Federal Reserve Bank of St Louis
<http://research.stlouisfed.org/fred>
178. Desai M, King St, Goodhart Ch 2015 Hubris: why economists failed to predict the crisis and how to avoid the next one *Public Lecture on 27.05.2015* London School of Economics and Political Science London UK
http://media.rawvoice.com/lse_publiclecturesandevents/richmedia.lse.ac.uk/publiclecturesandevents/20150527_1830_hubris.mp4 .
179. Desai M 2015 Do we need a new macroeconomics? *Public Lecture on 09.07.2015* London School of Economics and Political Science London UK (the presentation was made after the publication of an initial version of our research article at the MPRA and SSRN)
http://media.rawvoice.com/lse_publiclecturesandevents/richmedia.lse.ac.uk/publiclecturesandevents/20150709_1830_needNewMacroeconomics.mp3 .
180. Wall Street Journal 2015a Economic forecasting survey US GDP (quarterly) for 5 years (28.06.2015) Wall Street Journal New York USA
<http://projects.wsj.com/econforecast/#ind=gdp&r=20>
181. Wall Street Journal 2015b Economic forecasting survey US GDP (quarterly) for 7 years (28.06.2015) Wall Street Journal New York USA
<http://projects.wsj.com/econforecast/#ind=gdp&r=28>
182. Wikipedia (English) 2015c Business cycle *Wikipedia* California USA
www.wikipedia.org .

Firm Theory Science, Business Administration Science:

183. Babbage Ch 1832 On the economy of machinery and manufacturers *Charles Knight* 13 Pall Mall East London UK.
184. Ueda 1904 Shogyo Dai Jiten (The dictionary of commerce) Japan.
185. Ueda 1937 Keieikeizaigaku Saran (The science of business administration, Allgemeine Betriebswirtschaftslehre) Japan.
186. Marshall A 1923 Money, credit, and commerce *Prometheus Books* Amherst New York USA ISBN 13: 9781591020363.
187. Berle A, Means G 1932a The modern corporation and private property *The Commerce Clearing House* New York USA.
188. Berle A A, Means G 1932b The modern corporation *MacMillan* New York USA.
189. Ohlin B 1933 Interregional and international trade *Harvard University Press* Cambridge Massachusetts USA.
190. Coase R H 1937 The nature of the firm *Economica* vol 4 (16) pp 386 – 405 doi:10.1111/j.1468-0335.1937.tb00002.x year=1937.
191. Barnard C I 1938 The functions of the executive *Harvard University Press* Cambridge MA USA pp 241 – 244.
192. Barnard C I 1948 Organization and management: Selected papers *Harvard University Press* Cambridge MA USA.
193. Barnard C I 1949 The entrepreneur and formal organization *Change and the Entrepreneur. Harvard University Press* Cambridge MA USA.
194. Barnard C I 1958 Elementary conditions of business morale *California Management Review* vol 1 no 1.
195. Solow R M August 1957 Technical changes and the aggregate production function *Review of Economics and Statistics* 39 pp 214 – 231.
196. Modigliani F, Miller M June 1958 The cost of capital, corporation finance, and the theory of investment *American Economic Review* pp 261 – 297.
197. Baumol W 1959 Business behaviour, value and growth.
198. Baumol W 1962 The theory of expansion of the firm *American Economic Review*.
199. Penrose E T 1959 The theory of the growth of the firm *Oxford University Press* Oxford UK, *John Wiley and Sons Inc* New York USA.
200. Marris R May 1963 A model of the managerial enterprise *Quarterly Journal of Economics* 77 pp 185 – 209.
201. Telser L 1963 Cutthroat competition and the long purse *Journal of Law and Economics* 9 pp 259 – 277.

202. Williamson O E 1964 The economics of discretionary behavior: Managerial objectives in a theory of the firm *Prentice-Hall* Englewood Cliffs NJ USA.
203. Williamson O E 1975 Markets and hierarchies: Analysis and antitrust implications *Free Press* New York USA.
204. Williamson O E 1988 Corporate finance and corporate governance *Journal of Finance* **43** pp 567 – 591.
205. Cyert R, March J G 1963, 1992 A behavioral theory of the firm *Wiley-Blackwell* 2nd edition ISBN 0-631-17451-6.
206. Fogel R 1964 Railroads and American economic growth: Essays in econometric history *Johns Hopkins Press* Baltimore USA.
207. Manne H G 1965 Mergers and the market for corporate control *Journal of Political Economy* **73-74** pp 110 – 120.
208. Stigler G 1968 The organization of industry *Richard Irwin Inc* Homewood USA.
209. Mano O 1968-1969 On the science of business administration in Japan *Hokudai Economic Papers* vol **1** pp 77 – 93 Hokkaido University Japan.
210. Mano O 1970-1971 The development of the science of business administration in Japan since 1955 *Hokudai Economic Papers* vol **2** pp 30 – 42 Hokkaido University Japan.
211. Mano O 1972-1973 An approach to the organization economy - The development of Barnard's theory *Hokudai Economic Papers* vol **3** Hokkaido University Japan.
212. Mano O 1975-1976 Social responsibility of the firm-one development of Barnard's theory *Hokudai Economic Papers* vol **5** Hokkaido University Japan.
213. Mano O 1978 Soshiki Keizai no Kaimei (Organization economy - A study of the management theory of C. L. Barnard) *Bunshindo* Tokyo Japan.
214. Mano O 1980-1981 Barnard's theory of education for executives *Hokudai Economic Papers* vol **10** Hokkaido University Japan.
215. Mano O 1987 Barnard no Keiei Riron (Management Theory of C. I. Barnard) *Bunshindo* Tokyo Japan.
216. Mano O 1994 The Differences between Barnard's and Simon's Concept of Organization Equilibrium-Simon's Misunderstanding about Barnard's Intention *Economic Journal of Hokkaido University* vol **23** Hokkaido University Japan.
217. Mano O 1995 On the Significance of Lateral Organization In C. I. Barnard's Theory *Economic Journal of Hokkaido University* vol **24** pp 1 – 13 Hokkaido University Japan.
218. Black F, Scholes M 1973 The pricing of options and corporate liabilities *Journal of Political Economy* vol **81** pp 637 – 654.

219. Black F, Cox J C 1976 Valuing corporate securities: Some effects of bond indenture provisions *Journal of Finance* vol **31** pp 351 – 367.
220. Merton R C 1973 Theory of rational option pricing *Bell Journal of Economics and Management Science* vol **4** pp 141 – 183.
221. Merton R C 1974 On the pricing of corporate debt: The risk structure of interest rates *Journal of Finance* vol **29** pp 449 – 470.
222. Lee, Jung Hwan 1975 An essay on the theory of the firm *農業經營研究* vol **2** pp 133 – 153.
223. Jensen M C, Meckling W H 1976 Theory of the firm: Managerial behavior, agency costs and ownership structure *Journal of Financial Economics* **3** pp 305 – 360.
224. Jensen M C, Ruback R S 1983 The market for corporate control: The scientific evidence *Journal of Financial Economics* **11** pp 5 – 50.
225. Jensen M C 1986 Agency costs of free cash flow, corporate finance and takeovers *American Economic Review Papers and Proceedings of the 98th Annual Meeting of the American Economic Association* **76** (2) pp 323 – 329.
226. Jensen M C September-October 1989 The eclipse of the public corporation *Harvard Business Review* **67** (5) pp 61 – 74
<http://papers.ssrn.com/abstract=146149> .
227. Jensen M C, Murphy K J 1990 Performance pay and top management incentives *Journal of Political Economy* **98** (2) pp 225 – 264.
228. Jensen M C 1993 The modern industrial revolution: Exit and the failure of internal control systems *Journal of Finance* **48** (3) pp 831 – 880.
229. Jensen M C 2007 The economic case for private equity *Unpublished Harvard NOM Research Paper no 07-02*.
230. Fama E 1980 Agency problems and the theory of the firm *Journal of Political Economy* **88** pp 288 – 307.
231. Fama E, Jensen M 1983 Separation of ownership and control *Journal of Law and Economics* **26** pp 301 – 325.
232. Fama E, Jensen M 1985 Organizational forms and investment decisions *Journal of Financial Economics* vol **14** pp 101 – 119.
233. Demsetz H 1983 The structure of ownership and the theory of the firm *Journal of Law and Economics* vol **26** pp 375 – 390.
234. Demsetz H 1997 Theories of the firm: Their contrasts and implications *Chung-Hua Series of Lectures no 25 The Institute of Economics Academia Sinica Nankang Taipei Taiwan Republic of China*.

235. Wernerfelt B 1984 A resource-based view of the firm *Strategic Management Journal* **5** pp 171 – 180.
236. Wernerfelt B 1995 The resource-based view of the firm: Ten years after *Strategic Management Journal* **16** pp 171 – 174.
237. Lode Li 1986 A stochastic theory of the firm *Working Paper no 1844-86* Sloan School of Management MIT USA.
238. Perrow C 1986 Complex organizations *Random House* New York USA.
239. Hart O, Moore J 1990 Property Rights and the Nature of the Firm *Journal of Political Economy* vol **98** no 6 pp 1119 – 1158.
240. Hart O 2011 Thinking about the firm: A review of Daniel Spulber's the theory of the firm *Journal of Economic Literature* **49** (1) pp 101 – 113
<http://www.aeaweb.org/articles.php?doi=10.1257/jel.49.1.101> .
241. Sberman 2000 Business dynamics *McGraw Hill* USA.
242. Williamson O E 2002 The Theory of the firm as governance structure: From choice to contract *Journal of Economic Perspectives* vol **16**(3) pp 171 – 195.
243. Gompers P A, Metrick A, Ishii J L 2003 Corporate governance and equity prices *Quarterly Journal of Economics* **118** pp 107 – 156.
244. Kantarelis D 2007 Theories of the firm *Inderscience* Genève Switzerland ISBN 0-907776-34-5, ISBN: 0-907776-35-3.
245. Jacobides M G 2008 Competitive environments and redefining firm and industry boundaries *Public Lecture* London School of Economics and Political Science London UK.
246. Jacobides M G 2008 Can firms shape their environments to gain an architectural advantage? *Public Lecture* London School of Economics and Political Science London UK.
247. Spulber D F 2009 The theory of the firm: Microeconomics with endogenous entrepreneurs, firms, markets, and organizations *Cambridge University Press* UK
<http://www.cambridge.org/9780521736602> .
248. Ledenyov D O, Ledenyov V O 2013b On the theory of firm in nonlinear dynamic financial and economic systems *Cornell University* NY USA pp 1 – 27
www.arxiv.org/1206.4426v2.pdf .

Board of Directors Science, Interlocking Directors Networks Science, Firms Networks Science, Social Networks Science:

249. Brandeis L D 1915 Annals of the American academy of political and social science vol **57** *Proceedings of the Conference of American Mayors on Public Policies as to Municipal Utilities* pp 45 – 49.

250. Brandeis L D 1933 Other people's money-and how the bankers use it *Jacket Library* Washington National Home Library Foundation USA.
251. Luce R, Perry A 1949 A method of matrix analysis of group structure *Psychometrika* **14** pp 95 – 116.
252. Selznick P 1949 TVA and the grass roots *University of California Press* Los Angeles California, *Harper & Row* New York USA.
253. Selznick P 1957 Leadership in administration *Harper & Row* New York USA.
254. Ford L R, Fulkerson D R 1956 Maximum flow through a network *Canadian Journal of Mathematics* **8** pp 399 – 404.
255. Hopkins T K 1964 The exercise of influence in small groups *Bedminster Press* Totawa New Jersey USA.
256. Milgram S 1967 The small world problem *Psychology Today* **2** pp 60 – 67.
257. Travers A H 1968 Interlock in corporate management and the antitrust laws *Texas Law Review* **45** p 819.
258. Vance S C 1968 The corporate director. A critical evaluation *Dow-Jones Irvine* Homewood Illinois USA.
259. Dooley P C 1969 The interlocking directorate *American Economic Review* **59** pp 314 – 323.
260. Harary F 1969 Graph theory *Addison-Wesley* Reading MA USA.
261. Bunting D, Barbour J Autumn 1971 Interlocking directorates in large American corporations, 1896 - 1964 *Business History Review* **45** (3) pp 317 – 335.
262. Bunting D 1976 Corporate interlocking, part III - Interlocks and return on investment *Directors & Boards* **1** pp 4 – 11.
263. Mace M L 1971 Directors: Myths and reality *Harvard University Press* Cambridge Massachusetts USA.
264. Pfeffer J 1972 Size and composition of corporate boards of directors: The organization and its environment *Administrative Science Quarterly* **17** pp 218 – 228.
265. Pfeffer J 1973 Size, composition, and function of hospital boards of directors: A study of organization-environment linkage *Administrative Science Quarterly* **18** pp 349 – 364.
266. Pfeffer J, Salancik G R 1978 The external control of organizations: A resource-dependency perspective *Harper & Row* New York USA.
267. Pfeffer J 1981 Power in organizations *Pitman* Marshfield MA USA.
268. Pfeffer J 1983 Organizational demography in *Research in organizational behavior* Cummings L L, Staw B M (editors) *JAI Press* **5** Greenwich pp 449 – 461.

269. Blumberg P 1973 Reflections on proposals for corporate reform through change in the composition of the board of directors: “Special interest” or “Public” directors *Boston University Law Review* **53** p 547.
270. Bron C, Kerbosch J 1973 Finding all cliques of an undirected graph *Communications of the ACM* vol **16** pp 575 – 577.
271. Granovetter M 1973 The strength of weak ties *American Journal of Sociology* **81** pp 1287 – 1303.
272. Allen M P 1974 The structure of interorganizational elite cooptation: Interlocking corporate directorates *American Sociological Review* **39** pp 393 – 406.
273. Doreian P 1974 On the connectivity of social networks *Journal of Mathematical Sociology* vol **3** pp 245 – 258.
274. Zeitlin M 1974 Corporate ownership and control: The large corporation and the capitalist class *American Journal of Sociology* **81** pp 894 – 903.
275. Mariolis P 1975 Interlocking directorates and control of corporations: The theory of bank control *Social Science Questions* **56** pp 425 – 439.
276. Buchmann P 1976 Organisation der Verwaltungsräte in 20 der grössten Aktiengesellschaften in der Schweiz Bern Switzerland, Stuttgart Germany.
277. Burt R S 1976 Position in networks *Social Forces* vol **55** pp 93 – 122.
278. Burt R S 1983 Corporate profits and cooptation *Academic Press* New York USA.
279. Cuyvers L, Meeusen W 1976 The structure of personal influence of the Belgian holding companies *European Economic Review* **8** pp 51 – 69.
280. Cuyvers L, Meeusen W 1985 Financial groups in the Belgian network of interlocking directorships in *Networks of corporate power: A comparative analysis of ten countries* Stokman F N, Ziegler R, Scott J (editors) *Polity Press* Oxford UK.
281. Wilson R J 1976 Unlocking interlocks: The on-again off again saga of Section 8 of the Clayton Act *Antitrust Law Journal* **45** p 317.
282. Hughes M, John S, Mackenzie J 1977 Trends in interlocking directorships: An international comparison *Acta Sociologica* vol **20** issue 3 pp 287 – 292.
283. Tukey J W 1977 Exploratory data analysis *Addison-Wesley* USA.
284. Freeman L 1979a Centrality in social networks: A conceptual clarification *Social Networks* **1** pp 215 – 239.
285. Freeman L 1979b Visualizing social networks *School of Social Sciences* University of California Irvine California USA.

286. Koenig T, Gogel R, Sonquist J 1979 Models of the significance of interlocking corporate directorates *American Journal of Economics, Sociology* **38** pp 173 – 186.
287. Mokken R J 1979 Cliques, clubs and clans *Quality and Quantity* **13** pp 161 – 173.
288. Burt R S 1980 Cooptive corporate actor networks: A reconsideration of interlocking directorates involving American manufacturing *Administrative Science Quarterly* **25** pp 557 – 582.
289. Burt R S 1997 The contingent value of social capital *Administrative Science Quarterly* **42** pp 339 – 365.
290. Pennings J M 1980 Interlocking directorates *Jossey-Bass* San Francisco California USA.
291. Radcliff R 1980 Banks and corporate lending: An analysis of the impact of the internal structure of the capitalist class on the lending behavior of banks *American Sociological Review* **45** pp 553 – 570.
292. Boje D M, Whetten D A 1981 Effects of organizational strategies and constraints on centrality and attributions of influence in interorganizational networks *Administrative Science Quarterly* **26** pp 378 – 395.
293. Mintz B, Schwartz M 1981 Interlocking directorates and interest group formation *American Sociological Review* **46** (6) pp 851 – 869.
294. Mintz B, Schwartz M 1985 The power structure of American business *University of Chicago Press* Chicago Illinois USA.
295. Mizruchi M S, Bunting D 1981 Influence in corporate networks: An examination of four measures *Administrative Science Quarterly* **26** pp 475 – 489.
296. Mizruchi M S 1982 The American corporate network: 1904–1974 *Sage Publications* Beverly Hills California USA.
297. Stearns L B, Mizruchi M S 1986 Broken-tie reconstitution and the functions of interorganizational interlocks: A reexamination *Administrative Science Quarterly* **31** pp 522 – 538.
298. Mizruchi M S, Schwartz M (editors) 1987 Intercorporate relations: The structural analysis of business *Cambridge University Press* Cambridge UK.
299. Mizruchi M S, Stearns L B 1988 A longitudinal study of the formation of interlocking directorates *Administrative Science Quarterly* **33** pp 194 – 210.
300. Mizruchi M S 1992 The structure of corporate political action *Harvard University Press* Cambridge USA.
301. Mizruchi M S, Stearns L B 1994 A longitudinal study of borrowing by large American corporations *Administrative Science Quarterly* **39** pp 118 – 140.

302. Mizruchi M S 1996 What do interlocks do? An analysis, critique, and assessment of research on interlocking directorates *Annual Review of Sociology* **22** pp 271 – 298.
303. Byrd D T, Mizruchi M S 2005 Bankers on the board, the debt ratio of firms *Journal of Corporate Finance* **11** pp 129 – 173.
304. Schoorman F D, Bazerman M H, Atkin R S 1981 Interlocking directorates: A strategy for reducing environmental uncertainty *Academy of Management Review* **6** pp 243 – 251.
305. Mariolis P, Jones M H 1982 Centrality in corporate interlock networks: Reliability and stability *Administrative Science Quarterly* **27** pp 571 – 585.
306. Barnes J A 1983 Graph theory in network analysis *Social Networks* vol **5** pp 235 – 244.
307. Burt R S 1983 Corporate profits and cooptation *Academic Press* New York USA.
308. Dodd P, Warner J 1983 On corporate governance *Journal of Financial Economics* **11** pp 401 – 438.
309. Palmer D 1983 Broken ties: Interlocking directorates and inter-corporate coordination *Administrative Science Quarterly* **28** pp 40 – 55.
310. Roy W 1983 The interlocking directorate structure of the United States *American Sociological Review* **42** pp 248 – 257.
311. Vance S C 1983 Corporate leadership: Boards, directors, and strategy *Mc Graw-Hill* New York USA.
312. American Bar Association 1984 Section on Antitrust Law Monograph **10** Interlocking Directorates under Section 8 of Clayton Act. *Task force on interlocking directorates* Washington USA.
313. American Bar Association 2011 Interlocking directorates *Handbook on Section 8 of the Clayton Act* Washington USA.
314. Lease R C, McConnell J J, Mikkelson W H 1984 The market value of differential voting rights in closely held corporations *Journal of Business* vol **57** (4) pp 443 – 467.
315. Ornstein M 1984 Interlocking directorates in Canada: Inter-corporate or class alliance *Administrative Science Quarterly* **29** pp 210 – 231.
316. Scott J, Griff C 1984 Directors of industry: The British corporate networks 1904–76 *Polity Press* Cambridge USA.
317. Useem M 1984 The inner circle *Oxford University Press* New York USA.
318. Wasserman S, Faust K 1994 Social network analysis: Method and application *Cambridge University Press* Cambridge UK.

319. Ziegler R 1984 Das Netz der Personen- und Kapitalverflechtungen Deutscher und Österreichischer Wirtschaftsunternehmen *Kölner Zeitschrift für Soziologie und Sozialpsychologie* **36** pp 585 – 614.
320. Baysinger R, Butler H 1985 Corporate governance and the board of directors: Performance effects of changes in board composition *Journal of Law, Economics and Organization* **1** pp 101 – 124.
321. Baysinger B, Hoskisson R E 1990 The composition of boards of directors and strategic control: Effects on corporate strategy *Academy of Management Review* **15** pp 72 – 87.
322. Bearden J, Mintz B 1985 Regionality and integration in the American interlock network in Networks of corporate power Stokman F N, Ziegler R, Scott J (editors) *Polity Press* Cambridge UK.
323. Demsetz D, Lehn K 1985 The structure of corporate ownership: Causes and consequences *Journal of Political Economy* **93-6** pp 1155 – 1177.
324. Galaskiewicz J, Wasserman S, Rauschenbach B, Bielefeld W, Mullaney P 1985 The influence of corporate power, social status, and market position on corporate in a regional network *Social Forces* **64** (2) pp 401 – 431.
325. Meeusen W, Cuyvers L 1985 The interaction between interlocking directorships, the economic behaviour of companies in Networks of corporate power: A comparative analysis of ten countries Stokman F N, Ziegler R, Scott J (editors) *Polity Press* Oxford UK.
326. Stokman F N, Wasseur F W 1985 National networks in 1976: A structural comparison in Networks of corporate power: A comparative analysis of ten countries Stokman F N, Ziegler R, Scott J (editors) *Polity Press* Cambridge UK pp 20 – 44.
327. Stokman F N, van der Knoop J, Wasseur F W 1990 Interlocks in the Netherlands: Stability and careers in the period 1960-1980 in *The sociology of elites* vol **III** Interlocking directorships and corporate networks.
328. Mace M 1986 Directors: Myth and reality *Harvard Business School Press* Boston MA USA.
329. Glatthard A 1987 Unternehmenskonzentration in der Schweiz; Stand und Entwicklung von 1929 bis 1983 *Peter Lang Verlag* Bern Switzerland.
330. Richardson R J 1987 Directorship interlocks, corporate profitability *Administrative Science Quarterly* **32** pp 367 – 386.
331. Hermalin B, Weisbach M 1988 The determinants of board composition *Rand Journal of Economics* **19** pp 589 – 606.

332. Hermalin B, Weisbach M 1998 Endogenously chosen boards of directors and their monitoring of the CEO *American Economic Review* **88** pp 96 – 118.
333. Hill C W L, Snell S A 1988 External control, corporate strategy, and firm performance in research intensive industries *Strategic Management Journal* **9** pp 577 – 590.
334. Kesner I F 1988 Directors characteristics and committee membership: An investigation of type, occupation, tenure and gender *Academy of Management Journal* **30** pp 66 – 84.
335. Zajac E J 1988 Interlocking directorates as an inter-organizational strategy: A test of critical assumptions *Academy of Management Journal* **31** (2) pp 428 – 438.
336. Zajac E J, Westphal J D 1996 Director reputation, CEO-board power, and the dynamics of board interlocks *Administrative Science Quarterly* **41** pp 507 – 529.
337. Weisbach M 1988 Outside directorships and CEO turnover *Journal of Financial Economics* **20** pp 431 – 460.
338. Fosberg R 1989 Outside directors and managerial monitoring *Akron Business and Economic Review* **20** pp 24 – 32.
339. Lorsch J, MacIver E 1989 Pawns or potentates: The reality of America's corporate boards *Harvard Business School Press Boston MA USA*.
340. Nelson R E 1989 The strength of strong ties: Social networks and intergroup conflict in organizations *Organization Studies* **10** (2) pp 207 – 224.
341. Singh H, Harianto F 1989 Management-board relationships, takeover risk, and the adoption of golden parachutes *Academy of Management Journal* **32** pp 7 – 24.
342. Zahra S A, Pearce J A 1989 Boards of directors and corporate financial performance: A review and integrative model *Journal of Management* **15** pp 291 – 344.
343. Gilson S 1990 Bankruptcy, boards, banks, and block-holders: Evidence on changes in corporate ownership and control when firms default *Journal of Financial Economics* **27** pp 355 – 387.
344. Glaus B U 1990 Unternehmensüberwachung durch schweizerische Verwaltungsräte – Theoretische Grundlagen, rechtliche Anforderungen, Aufgabenwahrnehmung in Wirklichkeit und Gestaltungsempfehlungen *Doctoral Dissertation Hochschule St Gallen Switzerland*.
345. Kaplan S N, Reishus D 1990 Outside directorships and corporate performance *Journal of Financial Economics* **27** pp 389 – 410.
346. Kaplan S N, Minton B A 1994 Appointments of outsiders to Japanese boards: Determinants and implications for managers *Journal of Financial Economics* **36** pp 225 – 258.

347. Powell W 1990 Neither market nor hierarchy: Networks form of organizations *Research in Organizational Behavior* **12** pp 295 – 336.
348. Rosenstein S, Wyatt J 1990 Outside directors, board independence, and shareholder wealth *Journal of Financial Economics* **26** pp 175 – 191.
349. Rosenstein S, Wyatt J 1994 Shareholder wealth effects when an officer of one corporation joins the board of directors of another *Managerial and Decision Economics* **15** pp 317 – 327.
350. Rosenstein S, Wyatt J G 1997 Inside directors, board effectiveness, and shareholder wealth *Journal of Financial Economics* **44** pp 229 – 250.
351. Burris V 1991 Director interlocks and the political behavior of corporations and corporate elites *Social Science Quarterly* vol **72** (3) pp 537 – 551.
352. Davis G F 1991 Agents without principles? The spread of the poison pill through the intercorporate network *Administrative Science Quarterly* vol **36** pp 583 – 613.
353. Davis G F, Greve H R 1997 Corporate elite networks and governance changes in the 1980s *American Journal of Sociology* **103** pp 1 – 37.
354. Davis G F, Yoo M, Baker W E 2002 The network topography of the American corporate elite 1982-2001 *Working Paper* Business School University of Michigan USA.
355. Davis G F, Yoo M, Baker W E 2003 The small world of American corporate elite, 1982-2001 *Strategic Organization* vol **1** (3) pp 301 – 326.
356. Davis G F, Yoo M, Vast E December 2003 Le monde toujours plus petit des grandes entreprises Americaines *Gerer et Comprendre*.
357. Goodstein J, Boeker W 1991 Turbulence at the top: A new perspective on governance structure changes and strategic change *Academy of Management Journal* **34** pp 306 – 330.
358. Hermalin B, Weisbach M 1991 The effects of board composition and direct incentives on firm performance *Financial Management* **20** pp 101 – 112.
359. Hermalin B, Weisbach M 2001 Board of directors as an endogenously determined institution: A survey of the economic literature *Working Paper*.
360. Byrd J, Hickman k 1992 Do outside directors monitor managers? Evidence from tender offer bids *Journal of Financial Economics* **32** pp 195 – 221.
361. Demb A, Neubauer F F 1992 The corporate board: Confronting the paradoxes *Oxford University Press* NY USA.
362. Fligstein N, Brantley P 1992 Bank control, owner control, or organizational dynamics: Who controls the large modern corporation? *American Journal of Sociology* **98** pp 280 – 307.

363. Gerlach M L 1992 The Japanese corporate network: A blockmodel analysis *Administrative Science Quarterly* **37** (1) pp 105 – 139.
364. Judge W Q, Zeithaml C P 1992 Institutional and strategic choice perspectives on board involvement in the strategic decision making process *Academy of Management Journal* **35** pp 766 – 794.
365. Lee C I, Rosenstein S, Rangan N, Davidson III W N 1992 Board composition and shareholder wealth: The case of management buyouts *Financial Management* **21** pp 58 – 72.
366. Lincoln J R, Gerlach M L, Takahashi P 1992 Keiretsu networks in the Japanese economy: A dyad analysis of intercorporate ties *American Sociological Review* **57** pp 561 – 585.
367. Lipton M, Lorsch J 1992 A modest proposal for improved corporate governance *Business Lawyer* **59** pp 59 – 77.
368. Mallette P, Fowler K L 1992 Effects of board composition and stock ownership of the adoption of “poison pills” *Academy of Management Journal* **35** pp 1010 – 1035.
369. Milgrom P, Roberts J 1992 Organization and management *Prentice Hall* NJ USA.
370. Pearce II J A, Zahra S A 1992 Board composition from a strategic contingency perspective *Journal of Management Studies* **29** pp 411 – 438.
371. Pettigrew A M 1992 On studying managerial elites *Strategic Management Journal* **13** pp 163 – 182.
372. Smith C, Watts R 1992 The investment opportunity set and corporate financing, dividend, and compensation policies *Journal of Financial Economics* **32** pp 263 – 292.
373. Daily C M, Dalton D R 1993 Board of directors leadership and structure: Control and performance implications *Entrepreneurship: Theory and Practice* **17** (3) pp 65 – 82.
374. Daily C M, Dalton D R 1994 Bankruptcy and corporate governance: The impact of board composition and structure *Academy of Management Journal* **37** (6) pp 1603 – 1617.
375. Daily C M, Dalton D R 1997 CEO and board chair roles, held jointly or separately: Much ado about nothing? *Academy of Management Executive* **11** (3) pp 11 – 20.
376. Dalton D R, Daily C M, Ellstrand A E, Johnson J L 1998 Meta-analytic reviews of board composition, leadership structure, and financial performance *Strategic Management Journal* **19** pp 269 – 290.
377. Dalton D R, Daily C M, Johnson J L, Ellstrand A E 1999 Number of directors and financial performance: A meta-analysis *Academy of Management Journal* **42** (6) pp 674 – 686.

378. Jensen M C 1993 The modern industrial revolution, exit, and the failure of internal control systems *Journal of Finance* **48** pp 831 – 880.
379. Johnson R A, Hoskisson R E, Hitt M A 1993 Board of directors' involvement in restructuring: The effects of board versus managerial controls and characteristics *Strategic Management Journal* **14** pp 33 – 50.
380. Haunschild P R 1993 Interorganizational imitation: The impact of interlocks on corporate acquisition activity *Administrative Science Quarterly* **38** pp 564 – 592.
381. Haunschild P R, Beckman Ch M 1998 When do interlocks matter? Alternate sources of information and interlock influence *Administrative Science Quarterly* **43** pp 815 – 844.
382. Kester C W 1993 Banks in the boardroom: Germany, Japan and the United States in *Financial services: Perspectives and challenges* Samuel L Hayess III (editor) *Harvard Business School Press* Boston Massachusetts USA.
383. Millstein I M 1993 The evolution of the certifying board *Business Law* **48** p 1485.
384. Shivdasani A 1993 Board composition, ownership structure and hostile takeovers *Journal of Accounting and Economics* **16** pp 167 – 198.
385. Shivdasani A, Yermack D 1999 CEO involvement in the selection of new board members: An empirical analysis *Journal of Finance* **54** pp 1829 – 1854.
386. Barnhart S W, Marr M W, Rosenstein S 1994 Firm performance and board composition: Some new evidence *Managerial and Decision Economics* **15** pp 329 – 340.
387. Brickley J, Coles J, Terry R 1994 Outside directors and the adoption of poison pills *Journal of Financial Economics* **35** pp 371 – 390.
388. Brickley J, Coles J, Linck J 1999 What happens to CEOs after they retire? New evidence on career concerns, horizon problems, and CEO incentives *Journal of Financial Economics* **52** pp 341 – 377.
389. Goodstein J, Gautam K, Boeker W 1994 The effects of board size and diversity on strategic change *Strategic Management Journal* **15** pp 241 – 250.
390. Huse M 1994 Board-management relations in small firms: The paradox of simultaneous independence and interdependence *Small Business Economics* **6** pp 55 – 72.
391. Krackhardt D 1994 Graph theoretical dimensions of informal organizations in *Computational organization theory* Carley K M, Prietula M J (editors) *Lawrence Erlbaum Ass* Hillsdale USA.
392. Tricker R I 1994 *International corporate governance: Text, readings and cases* Prentice-Hall Singapore.

393. Wasserman S, Galaskiewicz J 1994 Advances in social network analysis: Research in the social and behavioral sciences *Thousand Oaks Sage California USA*.
394. Wasserman S, Faust K 1994 Social network analysis *Cambridge University Press Cambridge UK*.
395. Wasserman S, Faust K, Iacobucci D 1994 Social network analysis: Methods and applications *Cambridge University Press Cambridge UK*.
396. Benassi M 1995 Governance factors in a network process approach *Scandinavian Journal of Management* **11** pp 269 – 281.
397. Fligstein N 1995 Networks of power or the finance conception of control? Comment on Palmer, Barber, Zhou, and Soysal *American Sociological Review* **60** pp 500 – 503.
398. Hallock K January 1995 Executive pay and reciprocal interlocking boards of directors *Working Paper no 340 Industrial Relations Section Princeton University USA* pp 1 – 57.
399. Hill S 1995 The social organization of boards of directors *British Journal of Sociology* **46** (2) pp 245 – 278.
400. Kini O, Kracaw W, Mian S 1995 Corporate takeovers, firm performance, and board composition *Journal of Corporate Finance* **1** pp 383 – 412.
401. Klein A 1995 An examination of board committee structures *Working Paper*.
402. Lorsch J W January- February 1995 Empowering the boards *Harvard Business Review* pp 107 – 117.
403. Moerland P W 1995 Alternative disciplinary mechanisms in different corporate systems *Journal of Economic Behavior and Organization* **26** pp 17 – 34.
404. Moerland P W 1997 Corporate governance: Theorie en praktijk in internationaal perspectief Wolters-Noordhoff Groningen The Netherlands.
405. Moerland P W 1999 Corporate supervision in the Netherlands *Convergence and Diversity in Corporate Governance Regimes and Capital Markets Conference Tilburg University The Netherlands*.
406. Monks R, Minow N 1995 Corporate governance *Basil Blackwell Cambridge USA*.
407. O'Neal D, Thomas H 1995 Directors networks/director selection: The board's strategic role *European Management Journal* **13** (1) pp 79 – 90.
408. Pfannschmidt A 1995 Mehrfachmandate in deutschen Unternehmen *Zeitschrift für Betriebswirtschaft* **65** pp 177 – 203.
409. Wunderer F R 1995 Der Verwaltungsrats-Präsident *Ph. D. Dissertation Hochschule St Gallen Schulthess Polygraphischer Verlag Zürich Switzerland*.

410. Agrawal A, Knoeber C R 1996 Firm performance and mechanism to control agency problems between managers and shareholders *Journal of Financial and Quantitative Analysis* **31** pp 377 – 397.
411. Beasley M S 1996 An empirical analysis of the relation between the board of director composition and financial statement fraud *Accounting Review* **71** pp 443 – 455.
412. Bhagat S, Black B May 10-11 1996 Do independent directors matter? *The American Law and Economics Association Meeting* Chicago USA.
413. Bhagat S, Black B 1998 The uncertain relationship between board composition and firm performance *Columbia Law School Sloan Project* New York USA pp 291 – 316.
414. Bhagat S, Black B 1999 The uncertain relationship between board composition and firm performance *Business Law Review* vol **54** p 921 – 963.
415. Bhagat S, Black B 2002 The non-correlation between board independence and long-term firm performance *Journal of Corporation Law* **27** pp 231 – 273.
416. Booth J, Deli D 1996 Factors affecting the number of outside directorships held by CEOs *Journal of Financial Economics* **40** pp 81 – 104.
417. Booth J, Deli D 1999 On executives of financial institutions as outside directors *Journal of Corporate Finance* **5** pp 227 – 250.
418. Borokhovich K, Parrino R, Trapani T 1996 Outside directors and CEO selection *Journal of Financial and Quantitative Analysis* **3** pp 337 – 335.
419. De Cecco M, Ferri G 1996 Le banche d'affari in Italia *Il Mulino* Bologna Italy.
420. Doz Y 1996 The evolution of cooperation in strategic alliances: Initial conditions or learning processes? *Strategic Management Journal* **17** pp 55 – 83.
421. Park S, Rozeff M 1996 The role of outside shareholders, outside boards, and management entrenchment in CEO selection *Working Paper* SUNY Buffalo NY USA.
422. Sundaramurthy C 1996 Corporate governance within the context of antitakeover provisions *Strategic Management Journal* **17** pp 377 – 394.
423. Sundaramurthy C, Mahoney J M, Mahoney J T 1997 Board structure, antitakeover provisions, and stockholder wealth *Strategic Management Journal* **18** (3) pp 231 – 245.
424. Yermack D 1996 Higher market valuation of companies with a small board of directors *Journal of Financial Economics* **40** pp 185 – 211.
425. West D B 1996 Introduction to graph theory *Prentice Hall* Upper Saddle River NJ USA.
426. Williamson O E 1996 The mechanisms of governance *Oxford University Press* New York USA.

427. Bianco M, Pagnoni E 1997 I Legami creati tra le società quotate dagli interlocking directorates: Il caso delle banche *Quaderni di Moneta e Credito* Banca Nazionale del Lavoro Italy.
428. Cotter J, Shivdasani A, Zenner M 1997 Do independent directors enhance target shareholder wealth during tender offers? *Journal of Financial Economics* **43** pp 195 – 218.
429. Davies P L, Gower L C B 1997 Gower's principles of company law 6th edition *Sweet & Maxwell* ISBN-10: 0421524804 ISBN-13: 978-0421524804 pp 1 – 976.
430. Hallock K 1997 Reciprocally interlocking boards of directors and executive compensation *Journal of Financial and Quantitative Analysis* **32** pp 331 – 344.
431. John K, Senbet L W 1997 Corporate governance and board effectiveness *Working Paper* New York University NY USA.
432. Loderer C, Martin K 1997 Executive stock ownership and performance: Tracking faint traces *Journal of Financial Economics* **45** pp 223 – 255.
433. Loderer C, Peyer U September 5 2001, 2002 Board overlap, seat accumulation, and share prices *Social Science Research Network* USA SSRN-id273465.pdf, *European Financial Management* **8** pp 165 – 192.
434. Podolny J M, Baron J N 1997 Resources and relationships: Social networks and mobility in the workplace *American Sociological Review* **62** pp 673 – 693.
435. Rowley T J 1997 Moving beyond dyadic ties: A network theory of stakeholder influences *Academy of Management Review* issue **22** (4) pp 887 – 910.
436. Rowley T J 1998 Social network analysis in action: Using social network methodologies in stakeholder research *Proceedings of the 9th Annual Meeting of the International Association for Business and Society*.
437. Elms H, Berman S L, Rowley T J 2000 Network influences on CEO compensation *Proceedings for the 11th Annual International Association for Business & Society* Vermont USA.
438. Rowley T J, Behrens D, Krackhardt D 2000 Redundant governance structures: An analysis of structural and relational embeddedness in the steel and semiconductor industries *Strategic Management Journal* **21** pp 369 – 386.
439. Rowley T J June 3, 2005a Invited talk on Canadian directors networks *Rotman School of Management Alumni Meeting 2005* Fairmont Royal York Hotel Toronto Canada.
440. Rowley T J June 3, 2005b Private communications on the directors networks in the board of directors of the North American corporations *Rotman School of Management Alumni Meeting 2005* Fairmont Royal York Hotel Toronto Canada.

441. Rowley T J, Baum J 2008 The dynamics of network position *Network Strategy (Advances in Strategic Management)* vol **24**.
442. Shleifer A, Vishny R 1997 A survey of corporate governance *Journal of Finance* vol **52** pp 737 – 783.
443. Tufano P, Sevick M 1997 Board structure and fee-setting in the US mutual fund industry *Journal of Financial Economics* **46** pp 321 – 355.
444. Miller G T March 26 1997 Interlocking directorates and the antitrust laws *Colorado Lawyer* **53**.
445. Uzzi B 1997 Social structure and competition in inter-firm networks: The paradox of embeddedness *Administrative Science Quarterly* **42** pp 35 – 67.
446. Bollobas 1998 Modern graph theory *Springer-Verlag* New York USA.
447. Charan R 1998 Boards at work: How corporate boards create competitive advantage *Jossey-Bass* San Francisco USA.
448. Collin S-O 1998 Why are these islands of conscious power found in the ocean of ownership? Institutional, governance hypotheses explaining the existence of business groups in Sweden *Journal of Management Studies* **35** pp 719 – 746.
449. Denis D J, Sarin A 1998 Ownership and board structures in publicly traded corporations *Working Paper* Purdue University France.
450. Eisenberg Th, Sundgren S, Wells M T 1998 Larger board size and decreasing firm value in small firms *Journal of Financial Economics* **48** pp 35 – 54.
451. Fried V H, Bruton G D, Hisrich R D 1998 Strategy and the board of directors in venture capital-backed firms *Journal of Business Venturing* **13** pp 493 – 503.
452. Gulati R 1998 Alliances and networks *Strategic Management Journal Special Issue* **19** (4) pp 293 – 317.
453. Gulati R, Singh H 1998 The architecture of cooperation: Managing coordination uncertainty and interdependence in strategic alliances *Administrative Science Quarterly* **43** pp 781 – 814.
454. Gulati R 1999 Network location and learning: The influence of network resources and firm capabilities on alliance formation *Strategic Management Journal* **20** pp 397 – 420.
455. Gulati R, Garguilo M 1999 Where do networks come from? *American Journal of Sociology* **104** pp 1439 – 1493.
456. Gulati R, Westphal J D 1999 Cooperative or controlling? The effects of CEO-board relations and the content of interlocks on the formation of joint ventures *Administrative Science Quarterly* **44** pp 473 – 506.

457. Haunschild P R, Beckman C M 1998 When do interlocks matter? Alternate sources of information and interlock influence *Administrative Science Quarterly* vol **43** no 4 pp 815 – 844.
458. Hermalin B E, Weisbach M S 1998 Endogenously chosen boards of directors and their monitoring of the CEO *American Economic Review* vol **88** pp 96 – 118.
459. Hermalin B E, Weisbach M S 2003 Boards of directors as an endogenously determined institution: A survey of the economic literature *Working Paper Series Paper no 3* Centre for Responsible Business University of California Berkeley USA.
460. Hopt K J, Kanada H, Roe M J, Wymeersch E, Prigge S (editors) 1998 Comparative corporate governance - The state of the art and emerging research *Clarendon* Oxford UK.
461. Hopt K J 1998 The German two-tier board: Experience, theories, reforms *in* Comparative corporate governance: The state of the art and emerging research Hopt K J (editor) *Clarendon* USA
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=159555 .
462. Hopt K J, Leyens P C 2004 Board models in Europe – Recent developments of internal corporate governance structures in Germany, the United Kingdom, France, and Italy *ECGI Law Working Paper no 18/2004*.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=487944 .
463. Hung H 1998 A typology of the theories of the roles of governing boards *Corporate Governance: An International Review* **6** (2) pp 101 – 111.
464. Everett M G, Borgatti S P 1998 Analyzing clique overlap *Connections* **21** (1) pp 49 – 61.
465. Khanna T, Gulati R, Nohria N 1998 The dynamics of learning alliances: Competition, cooperation, and relative scope *Strategic Management Journal* **19** pp 193 – 210.
466. Klein A 1998a Firm productivity and board committee structure *Journal of Law and Economics* vol **41** pp 137 – 165.
467. Klein A 1998b Affiliated directors: Puppets of management or effective directors *Working Paper* Stern School of Business New York University NY USA.
468. La Porta R, Lopez de Silanes F, Shleifer A, Vishny R W 1998 Law and finance *Journal of Political Economy* **106** pp 1113 – 1155.
469. Mac Canna L, Brennan N, O’Higgins 1998 National networks of corporate power: An Irish perspective *Journal of Management and Governance* vol **2** no 4 pp 357 – 379.

470. Sanders W M G, Carpenter M A 1998 Internationalization and firm governance: The role of CEO compensation, top management team composition, and board structure *Academy of Management Journal* **41** (2) pp 158 – 178.
471. Spencer S 1998 *The Netherlands board index 3rd edition* Amsterdam The Netherlands.
472. Stuart T E 1998 Network positions and propensities to collaborate: An investigation of strategic alliance formation in a high-technology industry *Administrative Science Quarterly* **43** pp 668 – 698.
473. Wagner J A III, Stimpert J L, Fubara E I 1998 Board composition and organizational performance: Two studies of insider/outsider effects *Journal of Management Studies* **35** (5) pp 655 – 677.
474. Watts D J, Strogatz S H 1998 Collective dynamics of small-world networks *Nature* **393** pp 440 – 442.
475. Watts D J 1999a *Small worlds* Princeton University Press Princeton New Jersey USA.
476. Watts D J 1999b *Worlds. The dynamics of networks between order and randomness.*
477. Watts D J 1999c Networks, dynamics, and the small world phenomenon *American Journal of Sociology* **105** pp 493 – 527.
478. Barabasi A, Albert R 1999 Emergence of scaling in random networks *Science* vol **286** pp 509 – 512.
479. Barabasi A 2002 *Linked* Perseus Publishing Cambridge MA USA.
480. Borgatti S P, Everett M 1999 Models of core/periphery structures *Social Networks* **21** pp 375 – 395.
481. Borgatti S P 2002 *Basic social network concepts* AoM PDW Denver CO USA.
482. Borgatti S P, Everett M G, Freeman L C 2002 *Ucinet for Windows: Software for social network analysis* Analytic Technologies Harvard MA USA.
483. Borgatti S P, Foster P C 2003 The network paradigm in organizational research: A review and typology *Journal of Management* **29** (6) pp 991 – 1013.
484. Borgatti S P 2005 Centrality and network flow *Social Networks* **27** pp 55 – 71.
485. Borgatti S P 2006 Identifying sets of key players in a social network *Computational and Mathematical Organization Theory* **12** pp 21 – 34.
486. Carroll W K, Malcolm A August 1999 Finance capital and capitalists class integration in the 1990s: Networks of interlocking directorships in Canada and Australia *Canadian Review of Sociology & Anthropology* vol **36** issue 3 pp 331 – 354.
487. Core J, Holthausen R, Larcker D 1999 Corporate governance, CEO compensation, and firm performance *Journal of Financial Economics* **51** pp 371 – 406.

488. Davies A 1999 A strategic approach to corporate governance *Gower* Cambridge UK.
489. Fohlin C 1999 The rise of interlocking directorates in imperial Germany *Economic History Review* **52** (2) pp 307 – 333.
490. Forbes D P, Milliken F J 1999 Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups *Academy of Management Review* **24** pp 489 – 505.
491. Maassen G F 1999 An international comparison of corporate governance models *Ph D dissertation Erasmus University Rotterdam* The Netherlands.
492. MacAvoy P S, Millstein M 1999 The active board of directors and its effects on the performance of the large publicly traded corporation *Journal of Applied Corporate Finance* vol **11** (4) pp 8 – 20.
493. Maman D 1999 Interlocking ties within business groups in Israel – A longitudinal analysis, 1974-1987 *Organization Studies* **20** pp 323 – 339.
494. Maman D 2001 The organizational connection: Social capital, the career expansion of directors of business groups in Israel *Social Science Research* **30** pp 578 – 605.
495. Postma Th, van Ees H, Garretsen H, Sterken E 1999 Top management team and board characteristics and firm performance in The Netherlands *SOM - Research Report 99* Groningen The Netherlands.
496. Shivdasani A, Yermack D 1999 CEO involvement in the selection of new board members: An empirical analysis *Journal of Finance*
http://pages.stern.nyu.edu/~eofek/PhD/papers/SY_CEO_JF.pdf .
497. Vafeas N 1999 Board meeting frequency and firm performance *Journal of Financial Economics* **53** pp 113 – 142.
498. van Manen J, Hooghiemstra R B H 1999 Supervisory directors in the Netherlands: An expectations gap *Corporate Governance: Evidence from the Netherlands Workshop* University of Groningen The Netherlands.
499. Adams R B 2000 The dual role of corporate boards as advisors and monitors of management *Working Paper* Federal Reserve Bank of New York NY USA.
500. Barbi V 2000 Interlocking directorship networks: What is relevant for the evolution and change of the networks? *Working Paper no 278* Department of Economics University of Siena Italy
<http://ssrn.com/abstract=223543> .
501. Blackhurst C 2000 Would Sir care for another directorship? *Management Today* **5** pp 68 – 71.

502. Dyer J H, Noboeka K 2000 Creating and managing a high performance knowledge-sharing network: The Toyota case *Strategic Management Journal* **21** pp 345 – 368.
503. Fich E 2000 Do directors who are CEOs of other firms enhance firm performance? *UNC Working Paper* University of North Carolina NC USA.
504. Gargiulo M, Gulati R January 2000 Where do inter-organizational networks come from? *American Journal of Sociology*.
505. Gulik E H M, Gedajlovic E R, Maassen G F, Bosch F A J van den, Volberda H W July 8-11 2000 On the service role of boards of directors: Pfeffer (1972) across contexts *ASAC-IFSAM Conference* Montreal Canada.
506. Kracaw W, Zenner M 2000 Bankers in the boardroom: Good news or bad news? *UNC Working Paper*.
507. Miwa Y, Ramseyer M 2000 The value of prominent directors: Lessons in corporate governance from transition Japan *University of Tokyo, Harvard University* Japan, USA.
508. Robert III H M, Evans W J, Honemann D H, Balch Th J October 1 2000 Robert's rules of order newly revised *Da Capo Press* Cambridge MA USA ISBN 0-7382-0307-6.
509. Scott J 2000 Social network analysis: A handbook 2nd edition *Sage Publications* London UK.
510. Ward R D 2000 Improving corporate boards *John Wiley and Sons Inc* Toronto Canada.
511. Ferri G, Masciandaro D, Messori M 2001 Corporate governance, board turnover and performance: The case of local banks in Italy *Paolo Baffi Centre Working Paper no 01-150* Italy.
512. Ferris S, Jagannathan M 2001 The incidence and determinants of multiple corporate directorships *Applied Economics Letters* **8** pp 31 – 35.
513. Ferris S, Jagannathan M, Pritchard A 2002 Too busy to mind the business? Monitoring by directors with multiple board appointments *Journal of Finance*.
514. Ferris S P, Jagannathan M, Pritchard A 2003 Too busy to mind the business? Monitoring by directors with multiple board appointments *Journal of Finance* vol **58** pp 1087 – 1111.
515. Heracleous L, Murray J 2001 Networks, interlocking directors and strategy: Toward a theoretical framework *Asia Pacific Journal of Management* **18** pp 137 – 160.
516. Kroszner R, Strahan P 2001a Throwing good money after bad? Board connections and conflicts in bank lending *NBER Working Paper 8694* NBER USA.
517. Kroszner R, Strahan P 2001b Bankers on boards: Monitoring, conflicts of interest, and lender liability *Journal of Financial Economics* **62** pp 415 – 452.

518. Newman M E J, Strogatz S, Watts D 2001 Random graphs with arbitrary degree distribution and their applications *Physical Review* **64** pp 1 – 18.
519. Newman M E J 2003 The structure and function of complex networks *SIAM Review* **45** p 167.
520. Newman M E J 2007 The mathematics of networks *in* The new Palgrave encyclopedia of economics 2nd edition Blume L E, Durlauf S N (editors) *Palgrave Macmillan* Basingstoke UK.
521. Okazaki T, Yokoyama K October 2001 Measuring the extent and implications of director interlocking in the pre-war Japanese banking industry *Discussion Paper CIRJE-F-138* University of Tokyo Japan pp 1 – 47.
522. Postma Th, van Ees H 2001 On the functions of supervisory boards in the Netherlands *Department of Strategic Management Faculty of Management and Organization University of Groningen* The Netherlands pp 1 – 28.
523. Snijders T A B 2001 The statistical evaluation of social network dynamics *Sociological Methodology* **31** (1) p 361.
524. Snijders T A B 2003 Models for longitudinal network data *Working Paper*.
525. Tomka B 2001 Interlocking directorates between banks and industrial companies in Hungary at the beginning of the twentieth century *Business History* **43** (1) pp 25 – 42.
526. Watts A 2001 A dynamic model of network formation *Games and Economic Behavior* **34** pp 331 – 341.
527. Bainbridge S M 2002 Why a board? Group decision making in corporate governance *Vanderbilt Law Review* **55** pp 1 – 55.
528. Becht M, Bolton P, Roell A October 2002 Corporate governance and control www.ssrn.com .
529. Bianchi M, Bianco M, Enriques L 2002 Pyramidal groups and the separation between ownership and control in Italy *in* The control of corporate Europe Becht M, Barca F (editors) *Oxford Scholarship Online Monographs* Oxford UK.
530. Bianchi M, Bianco M, Giacomelli S, Paces A M, Trento S 2005 Proprieta e controllo delle imprese in Italia *Il Mulino* Bologna Italy.
531. Bianchi M, Bianco M 2006 Italian corporate governance in the last 15 years: From pyramids to coalitions? *ECGI - Finance Working Paper no 144/2006* European Corporate Governance Institute.
532. Carver J 2002 Corporate boards that create value: Governing company performance from the boardroom *Jossey-Bass* USA.

533. Everard A, Henry R 2002 A social network analysis of interlocked directorates in electronic commerce firms *Electronic Commerce Research and Applications* **1** pp 225 – 234.
534. Hanna V, Walsh K 2002 Small firm networks: A successful approach to innovation? *R&D Management* **32** (3) pp 201 – 207.
535. Faccio M, Lang L H P 2002 The ultimate ownership of Western European corporations in *Journal of Financial Economics* **65** pp 365 – 395.
536. Perry T, Peyer U C September 2002, August 12 2005 Board seat accumulation by executives: A shareholder's perspective *Working Paper 2002/102/FIN* INSEAD Boulevard de Constance 77305 Fontainebleau Cedex France pp 1 – 44, *Journal of Finance* vol **60** issue 4 pp 2083 – 2123 DOI: 10.1111/j.1540-6261.2005.00788.x .
537. Volpin P 2002 Governance with poor investor protection: Evidence from top executive turnover *Journal of Financial Economics* **64** pp 61 – 90.
538. Dann L Y, Del Guercio D, Partch M 2003 Governance and boards of directors in closed-end investment companies *Journal of Financial Economics* **69** pp 111 – 148.
539. De B 2003 The incidence, performance effects of interlocking directorates in emerging market business groups: Evidence from India *Working Paper* Indira Gandhi Institute of Development Research India.
540. Fich E M, White L J 2003 CEO compensation and turnover: The effects of mutually interlocked boards *Wake Forest Law Review* vol **38** pp 935 – 959.
541. Fich E M, White L J 2005 Why do CEOs reciprocally sit on each other's boards? *Journal of Corporate Finance* vol **11** pp 175 – 195.
542. Fich E M, Shivdasani A 2006 Are busy boards effective monitors? *Journal of Finance* vol **61** pp 689 – 724.
543. Gillette A B, Noe T H, Rebello M J 2003 Corporate board composition, protocols, and voting behavior experimental evidence *Journal of Finance* **58** pp 1997 – 2033.
544. Hermalin B E, Weisbach M S 2003 Boards of directors as an endogenously determined institution: A survey of the economic literature *Economic Policy Review* pp 7 – 26.
545. Humphry Hung July 2003 A dual network model of interlocking directorates *Asian Academy of Management Journal* vol **8** no 2 pp 45 – 66.
546. Levy M, Loebbecke C, Powell P 2003 SMEs, co-opetition and knowledge sharing: The role of information systems *European Journal of Information Systems* **12** pp 3 – 17.
547. Malcolm A 2003 Boardroom networks among Australian company directors, 1976 and 1996: The impact of investor capitalism *Journal of Sociology* vol **39** (3) pp 231 – 251.

548. Ong Ch H, Wan D, Ong K-S October 2003 An exploratory study on interlocking directorates in listed firms in Singapore *Corporate Governance: An International Review* vol **11** pp 322 – 334
<http://ssrn.com/abstract=444344> .
549. Ornstein M 2003 The Canadian corporate network in comparative perspective *Comparative Sociology Brill Academic Publishers* USA.
550. Phan P H, Lee S H, Lau S C 2003 The performance impact of interlocking directorates: The case of Singapore *Journal of Managerial Issues* **15** pp 338 – 352.
551. Rodriguez J A, Cardenas J, Oltra C 2003 Networks of economic power in Europe *Working Paper*.
552. Yeo H-J, Pochet C, Alcouffe A 2003 CEO reciprocal interlocks in French corporations *Journal of Management and Governance* **7** pp 87 – 108.
553. Bebchuk L A, Cohen A, Ferrell A 2004 What matters in corporate governance *Harvard University Olin Discussion Paper no 491*.
554. Bebchuk L A, Cohen A 2005 The cost of entrenched boards *Journal of Financial Economics* **78** pp 409 – 433.
555. Bebchuk L A, Grinstein Y, Peyer U 2006 Lucky CEOs *Working Paper 12771* National Bureau of Economic Research Cambridge USA pp 1 – 62
<http://www.nber.org/papers/w12771> .
556. Bebchuk L A, Grinstein Y, Peyer U 2006 Lucky directors *Working Paper 12811* National Bureau of Economic Research Cambridge USA pp 1 – 54
<http://www.nber.org/papers/w12811> .
557. Bebchuk L A, Cremers M, Peyer U 2007 CEO centrality *Working Paper 3701* National Bureau of Economic Research Cambridge USA pp 1 – 49
<http://www.nber.org/papers/w13701> .
558. Battiston S, Catanzaro M 2004 Statistical properties of corporate board and director networks *European Physical Journal B* **38** pp 345 – 352.
559. Caldarelli G, Catanzaro M 2004 The corporate boards networks *Physica A* **338** pp 98 – 106.
560. Hakansson H, Lind J 2004 Accounting and network coordination *Accounting, Organizations and Society* **29** pp 51 – 72.
561. Heinze T 2004 Dynamics in the German system of corporate governance? Empirical findings regarding interlocking directorates *Economy and Society* **33** pp 218 – 238.

562. Levine R April 2004 The corporate governance of banks: A concise discussion of concepts and issues *in* Global Corporate Governance Forum Washington D C USA www.gcgf.org .
563. OECD 2004 Principles of corporate governance *OECD* www.oecd.org .
564. O'Hagan S B, Green M B 2004 Corporate knowledge transfer via interlocking directorates: A network analysis approach *Geoforum* **35** pp 127 – 139.
565. Rinaldi A June 25-26 2004 Business elites in Italy: 1913-1972 *Business and Society: The 2004 Conference of the Association of Business Historians* Nottingham UK.
566. Rinaldi A, Vasta M 2005 The structure of Italian capitalism, 1952-1972: New evidence using the interlocking directorates technique *Financial History Review* **12** (2) pp 173 – 198.
567. Robins G, Alexander M 2004 Small worlds among interlocking directors: Network structure and distance in bipartite graphs *Computational and Mathematical Organization Theory* **10** pp 69 – 94.
568. Stablein R, Cleland P, Mackie B, Reid D 2004 New Zealand exchange limited (nzx) boards and directors: It is a small world after all *Working Paper*.
569. Attig N, Morck R 2005 Boards, corporate governance in a typical country *Working Paper* University of Alberta Canada.
570. Carrington P J, Scott J, Wasserman S 2005 Models and methods in social network analysis *Cambridge University Press* Cambridge UK.
571. Chabi S, Maati J 2005 Le petit monde du CAC 40 *La revue du financier* vol **153** pp 45 – 62.
572. Charan R 2005 Boards that deliver: Advancing corporate governance from compliance to competitive advantage *Jossey-Bass* USA.
573. De Nooy W, Mrvar A, Batagelj V 2005 Exploratory social network analysis with Pajek *Cambridge University Press* New York USA.
574. Hanneman R A, Riddle M 2005 Introduction to social network methods *University of California Riverside* California USA <http://faculty.ucr.edu/~hanneman/> .
575. Page F, Wooders M, Kamat S 2005 Networks and farsighted stability *Journal of Economic Theory* **120** pp 257 – 269.
576. Pueyo J 2005 Inter- firm relationships and interlocking directorates in Spanish banking in the twentieth century *Investigaciones de Historia Económica Dpto de Economía i Empresa* Universitat Pompeu Fabra Barcelona Spain.

577. Pueyo J 2006 Interlocking directorates in Spanish banking in the twentieth century *Dpto de Economia i Empresa Universitat Pompeu Fabra Barcelona Spain* pp 1 – 79.
578. Raheja Ch 2005 Determinants of board size and composition: A theory of corporate boards *Journal of Financial and Quantitative Analysis* **40**.
579. Rinaldi A, Vasta M 2005 The structure of Italian capitalism, 1952-1972: New evidence using the interlocking directorates technique *Financial History Review* **12** p 173.
580. Aguilera R V 2006 National state differences and patterns of directorship interlocks: A comparative study of Italy and Spain MIT USA
<http://www.mit.edu/~ecastill/2006seminar/papers/Aguilera2.pdf> .
581. Barucci E 2006 Mercato dei capitali e corporate governance in Italia *Carocci editore*.
582. Batagelj V, Mrvar A 2006 Pajek *University of Ljubljana*.
583. Bertoni F, Randone P A 2006 The small-world of Italian finance: Ownership interconnections and board interlocks amongst Italian listed companies
<http://ssrn.com/abstract=917587> .
584. Bizjak J, Lemmon M, Whitby R 2006 Option backdating and board interlocks *Working Paper* Portland State University, University of Utah USA.
585. Bizjak J, Lemmon M, Whitby R 2009 Option backdating and board interlocks *Review of Financial Studies* **22** pp 4821 – 4847.
586. Carbonai D, Di Bartolomeo G November 2006, August 2007 Interlocking directorates as a thrust substitute: The case of the Italian non-life insurance industry *Department of Communication Working Paper no 1-2006, MPRA Paper no 4420* Munich University Germany
<http://mpa.ub.uni-muenchen.de/4420/> .
587. Carretta A, Farina V, Schwizer P 2006 Evaluating the board of directors of financial intermediaries: Competencies, effectiveness and performance *University of Rome “Tor Vergata” Italy MPRA Paper no 8299* Munich University Germany pp 1 – 28
<http://mpa.ub.uni-muenchen.de/8299/> .
588. Farina V 2008 Banks' centrality in corporate interlock networks: Evidences in Italy Sefemeq Department University of Rome “Tor Vergata” Italy *MPRA Paper no 11698* Munich University Germany pp 1 – 31
<http://mpa.ub.uni-muenchen.de/11698/> .
589. Chhaochharia V, Grinstein Y 2006a Corporate governance and firm value: The impact of the 2002 governance rules *Journal of Finance*.

590. Chhaochharia V, Grinstein Y 2006b Executive compensation and board structure *Working Paper* Cornell University USA.
591. Chhaochharia V, Grinstein Y 2007 Corporate governance and firm value: The impact of the 2002 governance rules *Journal of Finance*
<http://faculty.fullerton.edu/jyang/Courses/fin332/Literature/governance%20rule%20result.pdf>.
592. Conyon M J, Muldoon M R 2006a The small world of corporate boards in Singapore *WSRC paper 2006 3/2* Wharton Pennsylvania USA – SMU Singapore Research Center.
593. Conyon M J, Muldoon M R 2006b The small world of corporate boards *Journal of Business Finance & Accounting* **33** (9) pp 1321 – 1343.
594. Corrado R, Zollo M 2006 Small worlds evolving: Governance reforms, privatizations, and ownership networks in Italy *Industrial and Corporate Change* vol **15** no 2 pp 319 – 352
<http://ssrn.com/abstract=915137> .
595. Elouaer S 2006 Boardroom networks among French companies: 1996 and 2005.
596. Ferrarini G A 2006 One share - one vote: A European rule? *ECGI - Law Working Paper no 58/2006*
www.ssrn.com .
597. Flores M 2006 IFIP International Federation for Information Processing *Network-Centric Collaboration and Supporting Fireworks* vol **224** pp 55 – 66 Springer Boston USA.
598. Guieu G, Meschi P X 2006 Conseils d'Administration et Reseaux d'Administrateurs en Europe (2000-2003): Dynamique et Structure *Working Paper*.
599. Jackson M O 2006 The economics of social networks Ch 1 vol **1** in *Advances in economics and econometrics theory and applications 9th World Congress of the Econometric Society* Blundell R, Newey W, Persson T (editors) *Cambridge University Press* Cambridge UK.
600. Kiel G C, Nicholson G J 2006 Multiple directorships, corporate performance in Australian listed companies *Corporate Governance* **14** pp 530 – 546.
601. Kramarz F, Thesmar D January 2006 Social networks in the boardroom *IZA Discussion Paper no 1940*
<http://ssrn.com/abstract=878678> .
602. Morresi O 2006 Performance, proprieta e turnover degli amministratori nel caso Italiano *Working Paper* Italy.
603. Murgia G 2006 L'impatto dell'interlocking sulle imprese del settore IT del Lazio: Uno studio basato sulla social network analysis *Working Paper*.

- 604.** Prinz E 2006 Corporate governance and the uncertain role of interlocking directorates *Cahier du Fargo no 1061001* Université de Bourgogne – LEG France pp 1 – 26.
- 605.** Silva F, Majluf N, Paredes R D 2006 Family ties, interlocking directorates, performance of business groups in emerging countries: The case of Chile *Journal of Business Research* **59** pp 315 – 321.
- 606.** Soon Moon Kang May 23 2006 Equi-centrality and network centralization: A micro-macro linkage *Netsci Conference*.
- 607.** Welch J, Welch S 2006 The boardroom bunker *The Welch way on Business Week* Business Week USA
http://www.businessweek.com/mediacenter/podcasts/welchway/welchway_12_17_06.htm .
- 608.** Adams R B, Ferreira D 2007 A theory of friendly boards *Journal of Finance* **62** pp 217 – 250.
- 609.** Adams R B, Hermalin B E, Weisbach M S 2010 The role of boards of directors in corporate governance: A conceptual framework and survey *Journal of Economic Literature* **48** pp 58 – 107.
- 610.** Ciocca P 2007 Ricchi per sempre? Una storia economica d'Italia (1796-2005) *Bollati Boringhieri* Torino Italy.
- 611.** Enriques L, Volpin M Winter 2007 Corporate governance reforms in continental Europe *Journal of Economic Perspectives* vol **21** no 1 pp 117 – 140.
- 612.** Gerber B M 2007 Enabling interlock benefits while preventing anticompetitive harm: Toward an optimal definition of competitors under section 8 of the Clayton Act *Yale Journal on Regulation* vol **24** I p 107.
- 613.** Ibarra H 2007 What you know or who you know? *INSEAD Knowledge-casts* INSEAD France.
- 614.** Ledenyov V O 2007a Can social networking boost businesses? *Financial Times* London UK
www.ft.com/cms/s/e5406470-860a-11dc-b00e-0000779fd2ac.html .
- 615.** Ledenyov V O 2007b Think like a leader *The Globe and Mail* Toronto Canada
<http://www.reportonbusiness.com/servlet/story/RTGAM.20071121.wmartindiscuss1128/BNStory/Business/home/?pageRequested=2> .
- 616.** Malloy Chr 2007 Social networks *Public Lecture* London School of Economics and Political Science London UK.
- 617.** Murray A S 2007 Revolt in the boardroom: The new rules of power in corporate America *Collins* USA.

- 618.** Non M, Franses P H 2007 Interlocking boards and firm performance: Evidence from a new panel database *Tinbergen Institute Discussion Paper TI 2007-034/2* The Netherlands pp 1 – 35
<http://www.tinbergen.nl> .
- 619.** Provan K G, Fish A, Sydow J 2007 Interorganizational networks at the network level: A review of the empirical literature on whole networks *Journal of Management* **33** (3) pp 479 – 516.
- 620.** Rommens A, Cuyvers L, Deloof M November 2007 Interlocking directorates and business groups: Belgian evidence *Research Paper 2007-023* Department of Accounting and Finance Faculty of Applied Economics University of Antwerp Belgium pp 1 – 42
<http://www.ua.ac.be/tew> .
- 621.** Deloof M, Vermoesen V December 2011 The value of bank relationships: Evidence from Belgium at the start of the Great Depression *Research Paper 2011-021* Department of Accounting and Finance Faculty of Applied Economics University of Antwerp Belgium pp 1 – 37
<http://www.ua.ac.be/tew> .
- 622.** Santella P, Drago C, Paone G 2007 Who cares about director independence? *Social Science Research Network USA, MPRA Paper no 2288* Munich University Munich Germany pp 1 – 74
<http://ssrn.com/abstract=971189> ,
<http://mpra.ub.uni-muenchen.de/2288/> .
- 623.** Santella P, Drago C, Polo A November 11 2007 The Italian chamber of lords sits on listed company boards: An empirical analysis of Italian listed company boards from 1998 to 2006 *MPRA Paper no 2265* Munich University Munich Germany pp 1 – 105
<http://mpra.ub.uni-muenchen.de/2265/> ,
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1027947 .
- 624.** Santella P, Drago C, Polo A, Gagliardi E 2009 A comparison among the director networks in the main listed companies in France, Germany, Italy, and the United Kingdom *MPRA Paper no 16397* Munich University Germany pp 1 – 19
<http://mpra.ub.uni-muenchen.de/16397/> .
- 625.** Uzzi B, Amaral L A N, Reed-Tsochas F 2007 Small-world networks and management science research: A review *European Management Review* **4** pp 77 – 91.
- 626.** Bowen W G 2008 The board book: An insider's guide for directors and trustees *W W Norton & Co* NY USA.

627. Harris M, Raviv A 2008 A theory of board control and size *Review of Financial Studies* **21** pp 1797 – 1832.
628. Milakovíc M, Alfarano S, Lux T 2008 The small core of the German corporate board network *Working Paper no 1446* Kiel Institute for the World Economy Germany.
629. Milakovíc M, Raddant M, Birg L 2009 Persistence of a network core in the time evolution of interlocking directorates *Economics Working Paper no 2009,10* Department of Economics Christian-Albrechts-Universität Kiel Germany
<http://hdl.handle.net/10419/29539> .
630. Vermeulen Fr 2008 How companies can get lucky and succeed *Public Lecture* London School of Economics and Political Science London UK.
631. Alfarano S, Milakovíc M 2009 Network structure and N-dependence in agent-based herding models *Journal of Economic Dynamics & Control* **33** pp 78 – 92.
632. Tutelman H 2008 The balance point: New ways business owners can use boards *Famille Press* USA.
633. Alvarez I, Marin R, Fonfria A 2009 The role of networking in the competitiveness of firms *Technological Forecasting & Social Change* **76** pp 410 – 421.
634. Cai J, Garner J L, Walkling R A 2009 Electing directors *Journal of Finance* **64** (5) pp 2387 – 2419.
635. Cai J, Garner J, Walkling R 2010 Shareholder access to the boardroom: A survey of recent evidence *Journal of Applied Finance* **20** (2) pp 15 – 26.
636. Rosch J T 2009 Terra incognita: Vertical and conglomerate merger and interlocking directorate law enforcement in the United States
<http://www.ftc.gov/speeches/rosch/090911roschspeechunivhongkong.pdf> .
637. Schonlau R, Singh P V 2009 Board networks and merger performance *Working Paper* Carnegie Mellon University NY USA.
638. Baccini A, Barabesi L 2010 Interlocking editorship. A network analysis of the links between economic journals *Scientometrist* **82** p 365.
639. Baccini A, Marroni L September 2013 In the shadow of the interlocking directorates regulation. A comparative case study *Research Paper no 683* Department of Economics and Statistics University of Siena Italy pp 1 – 30.
640. Stuart T E, Yim S 2010 Board interlocks and the propensity to be targeted in private equity transactions *Journal of Financial Economics* **97** pp 174 – 189.

- 641.** Black B, Kim W 2011 The effect of board structure on firm value: A multiple identification strategies approach using Korean data *MPRA Paper no 40283* Munich University Munich Germany pp 1 – 62
<http://mpra.ub.uni-muenchen.de/40283/> .
- 642.** Donzé P-Y 2011 The comeback of the Swiss watch industry on the world market: A business history of the Swatch Group (1983-2010) *Discussion Paper In Economics And Business 11-14* Graduate School of Economics and Osaka School of International Public Policy (OSIPP) Osaka University Toyonaka Osaka 560-0043 Japan, *MPRA Paper no 30736* Munich University Germany pp 1 – 37
<http://mpra.ub.uni-muenchen.de/30736/> .
- 643.** Gabrielsen T S, Hjelmeng E, Sorgard L 2011 Rethinking minority share ownership and interlocking directorships: The scope for competition law intervention *European Law Review* **6** p 837.
- 644.** Rousseau P L, Stroup C 2011 Director histories and the pattern of acquisitions *Working Paper no 11-W24* Department of Economics Vanderbilt University TN USA pp 1 – 46
www.vanderbilt.edu/econ .
- 645.** Chu J S G 2012 Who killed the inner circle? The end of the era of the corporate interlock network
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2061113 .
- 646.** Ghezzi F 2012 La nuova disciplina dei legami personali in Italia *Mercato concorrenza regole* **2** p 199.
- 647.** Gonzalez Diaz F E 2012 Minority shareholdings and interlocking directorships: The European Union approach *Antitrust Chronicle* **1**.
- 648.** Pawlak M 2012 An interlocking-directorates monitoring system *Institute of Economics and Management* The John Paul II Catholic University of Lublin Poland DOI: 10.2478/v10241-012-0005-7 pp 1 – 34.
- 649.** Schifeling T, Mizruchi M S August 27 - 28 2012 The decline of the American corporate network 1960-2010 *Corporate Networks in the 20th century Conference* University of Lausanne USA.
- 650.** Uddin M B 2012 Inter-firm cooperation and information sharing through interlocking directorates *Management & Marketing* vol **X** issue 2 pp 205 – 214.
- 651.** Anderson R, Sawyer H 2014 The board of directors as an agent of change in turnarounds *Transaction Advisors* ISSN 2329-9134
<https://www.transactionadvisors.com/insights/board-directors-agent-change-turnarounds> ,

<http://www.worldcat.org/issn/2329-9134> .

652. Whitehead Ch K December 22, 23 2014 Private communications on the boards of directors overlap in publicly traded and non-traded firms in the USA *V N Karazin Kharkiv National University Kharkiv Ukraine*.
653. Ferreira D January 15 2015 Corporate boards: Facts and myths *Public Lecture on 15.01.2015* Department of Finance & Financial Markets Group London School of Economics and Political Science London UK
20150115_1830_corporateBoardsFactsMyths_sl.pdf
http://media.rawvoice.com/lse_publiclecturesandevents/richmedia.lse.ac.uk/publiclecturesandevents/20150115_1830_corporateBoardsFactsMyths.mp4 .
654. Wikipedia January 15 2015 Board of directors USA
www.wikipedia.org .
655. Blood D, Wisniewska A January 22 2015 The tribes of Davos *Financial Times* London UK <http://blogs.ft.com/ftdata/2015/01/22/the-tribes-of-davos/> .
656. Ledenyov D O, Ledenyov V O 2015b Winning virtuous strategy creation by interlocking interconnecting directors in boards of directors in firms in information century *MPRA Paper no 61681* Munich University Munich Germany, *SSRN Paper no SSRN-id2553938 Social Sciences Research Network* New York USA pp 1 – 108
<http://mpa.ub.uni-muenchen.de/61681/> ,
<http://ssrn.com/abstract=2553938> .
657. Ledenyov D O, Ledenyov V O 2015n Quantum strategy creation by interlocking interconnecting directors in boards of directors in modern organizations at time of globalization *MPRA Paper no 68404* Munich University Munich Germany, *SSRN Paper no SSRN-id2704417 Social Sciences Research Network* New York USA pp 1 – 104
<http://mpa.ub.uni-muenchen.de/68404/> ,
<http://ssrn.com/abstract=2704417> .

Strategy Science, Strategic Governance Science, Management Science:

658. Chandler A D Jr 1962, 1998 Strategy and structure: Chapters in the history of the American industrial enterprise *Beard Books* USA ISBN-10: 158798198X ISBN-13: 978-1587981982 pp 1 – 480.
659. Chandler A D Jr 1977, 1993 The visible hand: The managerial revolution in American business *Belknap Press* ISBN-10 0674940520 ISBN-13 978-0674940529 pp 1 – 624.
660. Chandler A D Jr, Daems H 1980 Managerial hierarchies: Comparative perspectives on the rise of the modern industrial enterprise *Harvard University Press* ISBN 9780674547414 .

- 661.** Chandler A D Jr 1994 Scale and scope: The dynamics of industrial capitalism *Belknap Press* USA ISBN-10: 0674789954 ISBN-13: 978-0674789951 pp 1 – 780.
- 662.** Chandler A D Jr 2001 Inventing the electronic century: The epic story of the consumer electronics and computer industries *Free Press* USA ISBN-10: 0743215672 ISBN-13: 978-0743215671 pp 1 – 336.
- 663.** Chandler A D Jr 2005 Shaping the industrial century: The remarkable story of chemical and pharmaceutical industries *Harvard University Press* Cambridge Massachusetts USA ISBN 0-674-01720-X pp 1 – 366.
- 664.** Andrews K R 1971a The concept of corporate strategy *Richard D Irwin* Homewood USA.
- 665.** Andrews K R 1971b New horizons in corporate strategy *McKinsey Quarterly* vol **7** no 3 pp 34 – 43.
- 666.** Andrews K R 1980 Directors' responsibility for corporate strategy *Harvard Business Review* vol **58** no 6 pp 30 – 42.
- 667.** Andrews K R 1981a Corporate strategy as a vital function of the board *Harvard Business Review* vol **59** no 6 pp 174 – 180.
- 668.** Andrews K R 1981b Replaying the board's role in formulating strategy *Harvard Business Review* vol **59** no 3 pp 18 – 23.
- 669.** Andrews K R 1984 Corporate strategy: The essential intangibles *McKinsey Quarterly* no 4 pp 43 – 49.
- 670.** Rumelt R P 1974 Strategy, structure and economic performance *Harvard Business School Press* Boston MA USA.
- 671.** Rumelt R P 1982 Diversification strategy and profitability *Strategic Management Journal* **3** pp 359 – 369.
- 672.** Porter M E March-April 1979 How competitive forces shape strategy *Harvard Business Review* **57** (2) pp 137 – 145.
- 673.** Porter M E 1980, 1998 Competitive strategy: Techniques for analyzing industries and competitors *Free Press* New York USA.
- 674.** Porter M E, Harrigan K R 1981 A framework for looking at endgame strategies in Strategic management and business policy Glueck B (editor) *McGraw-Hill* USA.
- 675.** Porter M E 1982a Cases in competitive strategy *Free Press* New York USA.
- 676.** Porter M E 1982b Industrial organization and the evolution of concepts for strategic planning: The new learning in Corporate strategy: The integration of corporation planning

- models and economics Taylor T H (editor) *North-Holland Publishing Company* Amsterdam The Netherlands.
677. Porter M E, Salter M S March 1982, June 1986 Note on diversification as a strategy *Harvard Business School Background Note* Harvard University pp 382 – 129.
678. Porter M E 1983 Analyzing competitors: Predicting competitor behavior and formulating offensive and defensive strategy in *Policy, strategy, and implementation* Leontiades M (editor) *Random House* USA.
679. Porter M E 1985 Defensive strategy *Strategy* **7** (1).
680. Porter M E, Millar V July 1985 How information gives you competitive advantage *Harvard Business Review*
<http://hbr.org/1985/07/how-information-gives-you-competitive-advantage/ar/1> .
681. Porter M E May 1987a The state of strategic thinking *Economist* London UK.
682. Porter M E 1987b From competitive advantage to corporate strategy *Harvard Business Review* pp 43 – 59.
683. Porter M E April 1991 America's green strategy *Scientific American* **264** (4).
684. Porter M E 1991 Toward a dynamic theory of strategy *Strategic Management Journal* **12** pp 95 – 117.
685. Montgomery C A, Porter M E (editors) 1991 Strategy: Seeking and securing competitive advantage *Harvard Business School Press* Boston Massachusetts USA.
686. Porter M E 1994a Global strategy: Winning in the World-wide marketplace in *The portable MBA in strategy* Fahey L, Randall R M (editors) *John Willey & Sons* NY USA.
687. Porter M E 1994b Competitive strategy revisited: A view from the 1990s in *The relevance of a decade: Essays to mark the first ten years of the Harvard Business School Press* Duffy P B (editor) *Harvard Business School Press* Boston Massachusetts USA.
688. Porter M E, Van der Linde C 1995 Toward a new conception of the environment-competitiveness relationship *Journal of Economic Perspectives* **9** (4) pp 97 – 118.
689. Porter M E 1996a What is strategy? *Harvard Business Review* **74** (6) pp 61 – 78.
690. Porter M E December 1996b Tradeoffs, activity systems, and the theory of competitive strategy *Unpublished Work* Harvard University USA.
691. Porter M E March February 1997 New strategies for inner-city economic development *Economic Development Quarterly* **11** (1).
692. Schwab K, Connellius P, Porter M E 1999 The global competitiveness report *Oxford University Press* New York USA.

- 693.** Porter M E, Rivkin J W January 2000, March 2001 Competition & strategy: Course structure TN *Harvard Business School Teaching Note* Harvard University pp 700 – 091.
- 694.** Porter M E March 2001a Strategy and the Internet *Harvard Business Review* **79** (3) <http://hbr.org/2001/03/strategy-and-the-internet/ar/1> .
- 695.** Porter M E 2001b The technological dimension of competitive strategy in *Research on technological innovation, management and policy* vol **7** Burgelman R A, Chesbrough H (editors) *JAI Press* Greenwich CT USA.
- 696.** Porter M E, Kramer M R 2002 The competitive advantage of corporate philanthropy *Harvard Business Review* **80** (12) pp 56 – 68.
- 697.** Porter M E, Sakakibara M 2004 Competition in Japan *Journal of Economic Perspectives* Winter Issue.
- 698.** Anand B N, Bradley S P, Ghemawat P, Khanna T, Montgomery C A, Porter M E, Rivkin J W, Rukstad M G, Wells J R, Yoffie D B June 2005, September 2008 Strategy: Building and sustaining competitive advantage *Harvard Business School Class Lecture* Harvard University USA pp 705 – 509.
- 699.** Porter M E, Kramer M R December 2006 Strategy and society: The link between competitive advantage and corporate social responsibility *Harvard Business Review* **84** (12).
- 700.** Porter M E January 2008 The five competitive forces that shape strategy *Special Issue on HBS Centennial Harvard Business Review* **86** (1) <http://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy/ar/1> .
- 1243.** Porter M E, Kramer M R January-February 2011 Creating shared value *Harvard Business Review* Harvard Business School USA <https://hbr.org/2011/01/the-big-idea-creating-shared-value> .
- 701.** Porter M December 2013 Fundamental purpose *Value Investor Insight* pp 8 – 20 www.valueinvestorinsight.com .
- 702.** Porter M E, Heppelmann J E November 2014 How smart, connected products are transforming competition *Harvard Business Review* November USA <http://hbr.org/2014/11/how-smart-connected-products-are-transforming-competition/ar/1> .
- 703.** Porter M E 2015 Strategy award *Thinkers50* London UK www.thinkers50.org .
- 704.** Schendel D E, Hofer Ch W 1979 Strategic management. A new view of business policy and planning *Little Brown* Boston USA p 9.
- 705.** Yelle L E 1979 The learning curve: Historical review and comprehensive survey *Decision Sciences* **10** (2) pp 302 – 328.

706. Dess G G, Davis P S 1984 Porter's (1980) generic strategies as determinants of strategic group membership and organizational performance *Academy of Management Journal* **27** (3) pp 467 – 488.
707. Schwenk C R 1984 Cognitive simplification processes in strategic decision making *Strategic Management Journal* **5** pp 111 – 128.
708. Hambrick D C 1985 Turnaround strategies in *Handbook of strategic management* Guth W D (editor) *Warren, Gorham and Lamont* New York USA pp 10-1 to 10-32.
709. Palepu K G 1985 Diversification strategy, profit performance and the entropy measure *Strategic Management Journal* **6** pp 239 – 255.
710. Barney J B 1986 Strategic factor markets: Expectations, luck, and business strategy *Management Science* **32** (10) pp 1231 – 1241.
711. Barney J B 1991 Firm resources and sustained competitive advantage *Journal of Management* **17** (1) pp 99 – 120.
712. Huff A S, Reger R K 1987 A review of strategic process research *Journal of Management* vol **13** no 2 p 211.
713. Hill C W L, Snell S A 1988 External control, corporate strategy, and firm performance in research intensive industries *Strategic Management Journal* **9** pp 577 – 590.
714. Baysinger B D, Hoskisson R E 1989 Diversification strategy and R&D intensity in large multiproduct firms *Academy of Management Journal* **32** pp 310 – 332.
715. Rue L W, Holland P G 1989 *Strategic management: Concepts and experiences* 2nd edition *McGraw-Hill* Singapore; *Sage* Beverly Hills California USA.
716. Cohen W M, Levinthal D A 1990 Absorptive capacity: A new perspective on learning and innovation *Administrative Science Quarterly* **35** pp 128 – 152.
717. Goold M 1991 Strategic control in the decentralized firm *Sloan Management Review* **32** (2) pp 69 – 81.
718. Goold M, Luchs K 1993 Why diversify? Four decades of managed thinking *Academy of Management Executive* **7** (3) pp 7 – 25.
719. Goold M et al. 1994 *Corporate level strategy: Creating value in the multi-business company* *John Willey & Sons Inc* New York USA.
720. Goold M, Campbell A September, October 1998 Desperately seeking synergy *Harvard Business Review* pp 131 – 143.
721. Alexander M, Goold M, Collis D J, Campbell A, Lieberthal K, Montgomery C A, Palepu K, Prahalad C K, Stalk G, Khanna T, Hart S L, Shulman L F, Evans Ph 1992, 1995, 1996,

- 1997, 1998, 1999 Harvard Business Review on corporate strategy *Harvard University Press* Cambridge Massachusetts USA ISBN 1-57851-699-4.
722. Yip G 1992 Total global strategy: Managing for worldwide competitive advantage *Prentice Hall* NY USA.
723. Yip G 1998 Asian advantage: Key strategies for winning in the Asia-Pacific region *Addison Wesley/Perseus Books* USA.
724. Yip G 2000 Strategies for Central and Eastern Europe *Macmillan Business* USA.
725. Yip G 2007 Managing global customers *Oxford University Press* Oxford UK.
726. Campbell A et al 1995 Corporate strategy: The quest for parenting advantage *Harvard Business Review* **73** (2) pp 120 – 132.
727. Johnson G, Scholes K 1997 Exploring corporate strategy *Prentice-Hall* London UK.
728. Johnson G, Scholes K, Whittington R 1998 Exploring corporate strategy *Simon & Shuster* UK ISBN 0-2736-8734-4.
729. Johnson G, Scholes K, Whittington R 2002, 2003 Exploring corporate strategy 7th Edition *Prentice Hall* Pearson Education Limited UK ISBN 0-2736-8734-4.
730. McKiernan P 1997 Strategy past, strategy futures *Long range planning* vol **30** no 5 p 792.
731. Child J, Faulkner D 1998 Strategies of cooperation: Managing alliances, networks and joint ventures *Oxford University Press* Oxford UK.
732. Hill C, Jones G 1998 Strategic management 1st edition *Houghton Mifflin Co* Boston USA.
733. Hill C, Jones G 2004 Cases in strategic management 1st edition *Houghton Mifflin Co* Boston USA.
734. Martin R L (1998-1999, 2005-2006) Private communications on the theory of strategy *Rotman School of Management* University of Toronto Canada.
735. Moldoveanu M, Martin R L 2001 Agency theory and the design of efficient governance mechanisms *Joint Committee on Corporate Governance Meeting* Rotman School of Management University of Toronto Ontario Canada pp 1 – 57.
736. Martin R L 2004 Strategic choice structuring: A set of good choices positions a firm for competitive advantage *Rotman School of Management* University of Toronto Canada pp 1 – 14
www.rotman.utoronto.ca/strategicChoiceStructuring.pdf .
737. Martin R L 2007 Becoming an integrative thinker *Rotman Magazine* Rotman School of Management University of Toronto Ontario Canada pp 4 – 9.

738. Martin R L 2007 Designing the thinker *Rotman Magazine* Rotman School of Management University of Toronto Ontario Canada pp 4 – 8.
739. Martin R L 2008 The opposable mind *Harvard Business Press* Cambridge Massachusetts USA.
740. Martin R L 2009 The design of business *Harvard Business School Press* ISBN 1422177807 pp 1 – 256.
741. Lafley A G, Martin R L 2013 Playing to win: How strategy really works *Harvard Business Review Press* ISBN-10: 142218739X ISBN-13: 978-1422187395 pp 1 – 272.
742. Martin R L 2013 Strategy award *Thinkers50* London UK
www.thinkers50.org .
743. Shiryaev A N 1999 Essentials of stochastic finance: Facts, models, theory *Advanced Series on Statistical Science & Applied Probability* vol **3** World Scientific Publishing Co Pte Ltd Kruzhilin N (translator) ISBN 981-02-3605-0 Singapore pp 383 – 395, 633 – 646.
744. Laffont J-J, Tirole J 1999 Competition in telecommunications *MIT Press* USA.
745. Grant R 2001 Corporate strategy: Managing scope and strategy content in Handbook of strategy and management Pettigrew A, Thomas H, Whittington R (editors) *Sage* Newbury Park California USA pp 72 – 98.
746. Welch J 2001 Straight from the gut *Business Plus* ISBN-10: 0446528382 pp 1 – 496.
747. Welch J 2001 Winning *Warner Business Books* USA.
748. Choo C, Bontis N 2002 The strategic management of intellectual capital and organizational knowledge 1st edition *Oxford University Press* Oxford UK.
749. Drejer A 2002 Strategic management and core competencies 1st edition *Quorum Books* Westport Connecticut USA.
750. Sadler P 2003 Strategic management 1st edition *Kogan Page* Sterling VA USA.
751. Gavetti G, Levinthal D A 2004 The strategy field from the perspective of management science: Divergent strands and possible integration *Management Science* vol **50** no 10 pp 1309–1318 ISSN 0025-1909 EISSN 1526-5501.
752. Gavetti G, Rivkin J W 2007 On the origin of strategy: Action and cognition over time *Organization Science* vol **18** no 3 pp 420 – 439 ISSN 1047-7039 EISSN 1526-5455.
753. Kim W C, Mauborgne R January–February 2004 Value innovation – The strategic logic of high growth *Harvard Business Review* **75** pp 103 – 112
<http://hbr.org/2004/07/value-innovation-the-strategic-logic-of-high-growth/ar/1> .
754. Kim W C, Mauborgne R 2005, 2015 Blue ocean strategy: How to create uncontested market space and make the competition irrelevant *Harvard Business School Press* Boston

- USA ISBN 978-1591396192, ISBN 978-1-62527-449-6 (expanded edition)
 pp 1 – 240, pp 1 – 287.
www.blueoceanstrategy.com ,
<https://smart.ly/blue-ocean-strategy/> .
755. Kim W C, Mauborgne R 2011 Strategy award *Thinkers50* London UK
www.thinkers50.org .
756. Roney C 2004 Strategic management methodology 1st edition *Praeger* Westport
 Connecticut USA.
757. Ireland R, Hoskisson R, Hitt M 2006 Understanding business strategy 1st edition
Thomson Higher Education Mason OH USA.
758. Besanko D, Shanley M, Dranove D 2007 Economics of strategy *John Wiley & Sons Inc*
 USA.
759. Hitt M, Ireland R, Hoskisson R 2007 Management of strategy 1st edition *Thomson/South-*
Western Australia.
760. Kirkbride P S 2007 Developing a leadership and talent architecture *MBS Leader-casts*
 Melbourne Business School Melbourne Australia.
761. Murphy T, Galunic Ch 2007 Leading in the age of talent wars *INSEAD Leader-casts*
 INSEAD France.
762. Sekhar G 2007 Management information systems 1st edition *Excel Books* New Delhi
 India.
763. Sull D 2007a Simple rules: Strategy as simple rules Part II *Public Lecture* London School
 of Economics and Political Science London UK.
764. Sull D 2007b Closing the gap between strategy and execution: Strategy and its
 discontents *Public Lecture* London School of Economics and Political Science London UK.
765. Sull D 2007c Closing the gap between strategy and execution: Making hard choices
Public Lecture London School of Economics and Political Science London UK.
766. Sull D 2007d Closing the gap between strategy and execution: The strategy loop in action
Public Lecture London School of Economics and Political Science London UK.
767. Sull D 2008 An iterative approach to the strategy *Public Lecture* London School of
 Economics and Political Science London UK.
768. Teece D J, Winter S 2007 Dynamic capabilities: Understanding strategic change in
 organizations *Blackwell* Oxford UK.
769. Samuels R 2008 Japan's grand strategy *Public Lecture on 13.10.2008* London School of
 Economics and Political Science London UK

<http://www.lse.ac.uk/collections/LSEPublicLecturesAndEvents/events/2008/20080819t1316z001.htm>

http://richmedia.lse.ac.uk/publicLecturesAndEvents/20081013_1830_japansGrandStrategy.mp3

770. Chamberlain G P 2010 Understanding strategy *Create Space* Charleston South Carolina USA.

771. Holt D, Cameron D 2010 Cultural strategy *Oxford University Press* Oxford UK ISBN 978-0-19-958740-7.

772. Heracleous 2013 Quantum strategy by Apple Inc *Organizational Dynamics* **42** pp 92 – 99 www.elsevier.com/locate/orgdyn .

773. Ledenyov D O, Ledenyov V O 2015b Winning virtuous strategy creation by interlocking interconnecting directors in boards of directors in firms in information century *MPRA Paper no 61681* Munich University Munich Germany, *SSRN Paper no SSRN-id2553938* *Social Sciences Research Network* New York USA pp 1 – 108
<http://mpa.ub.uni-muenchen.de/61681/> ,
<http://ssrn.com/abstract=2553938> .

774. Ledenyov D O, Ledenyov V O 2015n Quantum strategy creation by interlocking interconnecting directors in boards of directors in modern organizations at time of globalization *MPRA Paper no 68404* Munich University Munich Germany, *SSRN Paper no SSRN-id2704417* *Social Sciences Research Network* New York USA pp 1 – 104
<http://mpa.ub.uni-muenchen.de/68404/> ,
<http://ssrn.com/abstract=2704417> .

Disruptive Innovation in Technology, Economics and Finances:

775. Schumpeter J A 1911; 1939, 1961 Theorie der wirtschaftlichen entwicklung; The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle Redvers Opie (translator) *OUP* New York USA.

776. Schumpeter J A 1939 Business cycle *McGraw-Hill* New York USA.

777. Schumpeter J A 1947 The creative response in economic history *Journal of Economic History* vol **7** pp 149 – 159.

778. Solow R H August 1957 Technical change and the aggregate production function *Review of Economics and Statistics* **39** pp 214 – 231.

779. Christensen C M June 16, 1977 Fatal attraction: The dangers of too much technology *Computerworld Leadership Series* pp 3 – 11.

780. Christensen C M Fall 1992a Exploring the limits of the technology S-curve, Part 1: Component Technologies *Production and Operations Management* **1** pp 334 – 357.
781. Christensen C M Fall 1992b Exploring the limits of the technology S-curve, Part 2: Architectural technologies *Production and Operations Management* **1** pp 358 – 366.
782. Bower J L, Christensen C M January February 1995 Disruptive technologies: Catching the wave *Harvard Business Review* **73** no 1 pp 43 – 53.
783. Bower J L, Christensen C M 1997 Disruptive technologies: Catching the wave *in* Seeing differently: Insights on innovation Brown J S (editor) *Harvard Business School Press* Boston MA USA.
784. Christensen C M 1997 The innovator's dilemma: When new technologies cause great firms to fail *Harvard Business School Press* Boston MA USA.
785. Christensen C M, Armstrong E G Spring 1998 Disruptive technologies: A credible threat to leading programs in continuing medical education? *Journal of Continuing Education in the Health Professions* **69** no 80 pp 69 – 80.
786. Christensen C M 1998 The evolution of innovation *in* Technology management handbook Dorf R (editor) *CRC Press* Boca Raton FL USA.
787. Christensen C M December 1998 Disruptive technologies: Catching the wave TN *Harvard Business School Teaching Note* 699 - 125.
788. Christensen C M, Cape E G December 1998 Disruptive technology a heartbeat away: Ecton, Inc *Harvard Business School Case* 699 - 018.
789. Christensen C M April 1999a Value networks and the impetus to change: Managing innovation: Overview teaching note for module 1 *Harvard Business School Teaching Note* 699 - 163.
790. Christensen C M April 1999b Finding new markets for new and disruptive technologies: Managing innovation, overview teaching note for module 2 *Harvard Business School Teaching Note* 699 - 164.
791. Christensen C M April 1999c Teradyne: The Aurora project & Teradyne: Corporate management of disruptive change, TN *Harvard Business School Teaching Note* 399 - 087.
792. Christensen C M, Dann J June 1999 Processes of strategy definition and implementation, The *Harvard Business School Background Note* 399 - 179.
793. Bower J L, Christensen C M 1999 Disruptive technologies: Catching the wave Ch 29 *in* The entrepreneurial venture 2nd edition Sahlman W A, Stevenson H H, Roberts M J, Bhidé A V pp 506 – 520 *Harvard Business School Press* Boston MA USA.

794. Christensen C M 1999a Innovation and the general manager *Irwin McGraw-Hill* Homewood IL USA.
795. Christensen C M 1999b Impact of disruptive technologies in telecommunications in Bringing PC economies to the telecommunications industry *PulsePoint Communications*.
796. Christensen C M, Tedlow R S January February 2000 Patterns of disruption in retailing *Harvard Business Review* **78** no 1 pp 42 – 45.
797. Christensen C M, Donovan T March 2000 Disruptive technology a heartbeat away: Ecton, Inc TN *Harvard Business School Teaching Note* 600 - 129.
798. Christensen C M, Overdorf M March April 2000 Meeting the challenge of disruptive change *Harvard Business Review* **78** no 2 pp 66 – 76.
799. Christensen C M, Bohmer R M J, Kenagy J September October 2000 Will disruptive innovations cure health care? *Harvard Business Review* **78** no 5 pp 102 – 117.
800. Christensen C M, Craig Th, Hart S March April 2001 The great disruption *Foreign Affairs* **80** no 2.
801. Christensen C M Summer 2001 Assessing your organization's innovation capabilities *Leader to Leader* no 21 pp 27 – 37.
802. Christensen C M, Milunovich S March 2002 Technology strategy: The theory and application of the Christensen model *Merrill Lynch Report Series*.
803. Bass M J, Christensen C M April 2002 The future of the microprocessor business *IEEE Spectrum* **39** no 4.
804. Anthony S D, Roth E A, Christensen C M April 2002 The policymaker's dilemma: The impact of government intervention on innovation in the telecommunications industry *Harvard Business School Working Paper* no 02 - 075.
805. Kenagy J, Christensen C M May 2002 Disruptive innovation: A new diagnosis for health care's 'Financial flu' *Healthcare Financial Management* pp 62 – 66.
806. Christensen C M, Johnson M W, Rigby D K Spring 2002 Foundations for growth: How to identify and build disruptive new businesses *MIT Sloan Management Review* **43** no 3.
807. Kenagy J W, Christensen C M 2002 Disruptive innovation - New diagnosis and treatment for the systemic maladies of healthcare *World Markets Series Business Briefing Global Healthcare 2002* pp 14 – 17.
808. Christensen C M June 2002 The rules of innovation *Technology Review*.
809. Hart S L, Christensen C M Fall 2002 The great leap: Driving innovation from the base of the global pyramid *MIT Sloan Management Review* **44** no 1 pp 51 – 56.

- 810.** Christensen C M, Verlinden M, Westerman G November 2002 Disruption, disintegration, and the dissipation of differentiability *Industrial and Corporate Change* **11** no 5 pp 955 – 993.
- 811.** Christensen C M 2003 The opportunity and threat of disruptive technologies *Harvard Business School Publishing Class Lecture HBSP Product Number 1482C Boston MA USA.*
- 812.** Shah Ch D, Brennan T A, Christensen C M April 2003 Interventional radiology: Disrupting invasive medicine.
- 813.** Christensen C M March April 2003 Beyond the innovator's dilemma *Strategy & Innovation* **1** no 1.
- 814.** Christensen C M, Raynor M E 2003 The innovator's solution: Creating and sustaining successful growth *Harvard Business School Press Boston MA USA.*
- 815.** Burgelman R A, Christensen C M, Wheelwright S C 2003 Strategic management of technology and innovation 4th edition *McGraw-Hill Irwin USA.*
- 816.** Christensen C M, Anthony S D January February 2004 Cheaper, faster, easier: Disruption in the service sector *Strategy & Innovation* **2** no 1.
- 817.** Christensen C M, Anthony S D, Roth E A 2004 Seeing what's next: Using the theories of innovation to predict industry change *Harvard Business School Press Boston MA USA.*
- 818.** Christensen C M January 2006 The ongoing process of building a theory of disruption *Journal of Product Innovation Management* **23** pp 39 – 55.
- 819.** Christensen C M, Baumann H, Ruggles R, Sadtler Th M December 2006 Disruptive innovation for social change *Harvard Business Review* **84** no 12.
- 820.** Christensen C M, Horn M B, Johnson C W 2008 Disrupting class: How disruptive innovation will change the way the World learns *McGraw-Hill USA.*
- 821.** Christensen C M, Grossman J H, Hwang J 2009 The innovator's prescription: A disruptive solution for health care *McGraw-Hill USA.*
- 822.** Dyer J H, Gregersen H B, Christensen C M December 2009 The innovator's DNA *Harvard Business Review* **87** no 12.
- 823.** Christensen C M, Donovan T May 2010 Disruptive IPOs? WR Hambrecht & Co *Harvard Business School Case 610-065.*
- 824.** Dyer J H, Gregersen H B, Christensen C M 2011 The innovator's DNA: Mastering the five skills of disruptive innovators *Harvard Business Press Boston MA USA.*
- 825.** Christensen C M, Talukdar Sh, Alton R, Horn M B Spring 2011 Picking green tech's winners and losers *Stanford Social Innovation Review USA.*

826. Christensen C M, Wang D, van Bever D October 2013 Consulting on the cusp of disruption *Harvard Business Review* **91** no 10 pp 106 – 114.
827. Christensen C M, Raynor M E, McDonald R December 2015 What is disruptive innovation? *Harvard Business Review* Cambridge MA USA pp 44 – 53
<https://hbr.org/2015/12/what-is-disruptive-innovation> .
828. Christensen C M, Denning St December 2015 Disruptive innovation *Forbes* New York USA
<http://www.forbes.com/sites#/sites/stevedenning/2015/12/02/fresh-insights-from-clayton-christensen-on-disruptive-innovation/> .
829. Bhattacharya S, Ritter J R 1983 Innovation and communication: Signaling with partial disclosure *Review of Economic Studies* **50** pp 331 – 346.
830. Scherer F M 1984 Innovation and growth: Schumpeterian perspectives *MIT Press* Cambridge MA USA.
831. Rodin J 2015 Managing disruption, avoiding disaster and growing stronger in an unpredictable World *Public Lecture on 19.01.2015* London School of Economics and Political Science London UK
http://media.rawvoice.com/lse_publiclecturesandevents/richmedia.lse.ac.uk/publiclecturesandevents/20150119_1830_managingDisruption.mp4 .
1244. Dobbs R, Woetzel J, Flanders St 2015 No ordinary disruption: The four global forces breaking all the trends *Public Lecture on 08.06.2015* London School of Economics and Political Science London UK
http://media.rawvoice.com/lse_publiclecturesandevents/richmedia.lse.ac.uk/publiclecturesandevents/20150608_1830_noOrdinaryDisruption.mp4 .
832. Barber L 2015 Making news for the new World *Public Lecture on 12.11.2015* London School of Economics and Political Science London UK
http://media.rawvoice.com/lse_publiclecturesandevents/richmedia.lse.ac.uk/publiclecturesandevents/20151112_1830_makingNewsForTheNewWorld.mp4 .

Information Absorption in Economics, Finances, Business Administration Sciences and Information Asymmetry in Economics, Finances, Business Administration Sciences:

833. Akerlof G A 1970 The market for lemons: Qualitative uncertainty and the market mechanism *Quarterly Journal of Economics* **84** (3) pp 488 – 500.
834. Akerlof G A August 29 2014 Writing the "The Market for 'Lemons'": A Personal Interpretive Essay Nobelprize.org. Nobel Media AB 2014. Web. 29 Aug 2014.

- http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2001/akerlof-article.html?utm_source=facebook&utm_medium=social&utm_campaign=facebook_page .
835. Leland H, Pyle D 1977 Informational asymmetries, financial structure and financial intermediation *Journal of Finance* **32** pp 371 – 387.
836. Cohen W M, Levinthal D A 1989 Innovation and learning: The two faces of R&D *Economic Journal* **99** pp 569 – 596.
837. Cohen W M, Levinthal D A 1990 Absorptive capacity: A new perspective on learning and innovation *Administrative Science Quarterly* **35** pp 128 – 152.
838. Nonaka I 1994 A dynamic theory of organizational knowledge creation *Organization Science* **5** (1) pp 14 – 37.
839. Kumar R, Nti K O 1998 Differential learning and interaction in alliance dynamics: A process and outcome discrepancy model *Organization Science* **9** pp 356 – 367.
840. Lane R J, Lubatkin M 1998 Relative absorptive capacity and inter-organizational learning *Strategic Management Journal* **19** pp 461 – 477.
841. Farina V 2008 Network embeddedness, specialization choices and performance in investment banking industry *University of Rome Tor Vergata Italy MPRA Paper no 11701* Munich University Munich Germany pp 1 – 26
<http://mpra.ub.uni-muenchen.de/11701/> .
- Selected Research Papers in Macroeconomics, Microeconomics & Nanoeconomics Sciences:**
842. Ledenyov V O, Ledenyov D O 2012a Shaping the international financial system in century of globalization *Cornell University NY USA* pp 1 – 20
www.arxiv.org/1206.2022.pdf .
843. Ledenyov V O, Ledenyov D O 2012b Designing the new architecture of international financial system in era of great changes by globalization *Cornell University NY USA* pp 1 – 18
www.arxiv.org/1206.2778.pdf .
844. Ledenyov D O, Ledenyov V O 2012a On the new central bank strategy toward monetary and financial instabilities management in finances: econophysical analysis of nonlinear dynamical financial systems *Cornell University NY USA* pp 1 – 8
www.arxiv.org/1211.1897.pdf .
845. Ledenyov D O, Ledenyov V O 2012b On the risk management with application of econophysics analysis in central banks and financial institutions *Cornell University NY USA* pp 1 – 10
www.arxiv.org/1211.4108.pdf .

- 846.** Ledenyov D O, Ledenyov V O 2013a On the optimal allocation of assets in investment portfolio with application of modern portfolio management and nonlinear dynamic chaos theories in investment, commercial and central banks *Cornell University NY USA* pp 1 – 34 [www.arxiv.org/1301.4881.pdf](http://www.arxiv.org/abs/1301.4881) .
- 847.** Ledenyov D O, Ledenyov V O 2013b On the theory of firm in nonlinear dynamic financial and economic systems *Cornell University NY USA* pp 1 – 27 [www.arxiv.org/1206.4426v2.pdf](http://www.arxiv.org/abs/1206.4426v2) .
- 848.** Ledenyov D O, Ledenyov V O 2013c On the accurate characterization of business cycles in nonlinear dynamic financial and economic systems *Cornell University NY USA* pp 1 – 26 [www.arxiv.org/1304.4807.pdf](http://www.arxiv.org/abs/1304.4807) .
- 849.** Ledenyov D O, Ledenyov V O 2013d To the problem of turbulence in quantitative easing transmission channels and transactions network channels at quantitative easing policy implementation by central banks *Cornell University NY USA* pp 1 – 40 [www.arxiv.org/1305.5656.pdf](http://www.arxiv.org/abs/1305.5656) .
- 850.** Ledenyov D O, Ledenyov V O 2013e To the problem of evaluation of market risk of global equity index portfolio in global capital markets *MPRA Paper no 47708* Munich University Munich Germany pp 1 – 25 <http://mpra.ub.uni-muenchen.de/47708/> .
- 851.** Ledenyov D O, Ledenyov V O 2013f Some thoughts on accurate characterization of stock market indexes trends in conditions of nonlinear capital flows during electronic trading at stock exchanges in global capital markets *MPRA Paper no 49964* Munich University Munich Germany pp 1 – 52 <http://mpra.ub.uni-muenchen.de/49964/> .
- 852.** Ledenyov D O, Ledenyov V O 2013g On the Stratonovich - Kalman - Bucy filtering algorithm application for accurate characterization of financial time series with use of state-space model by central banks *MPRA Paper no 50235* Munich University Munich Germany pp 1 – 52, *SSRN Paper no SSRN-id2594333* *Social Sciences Research Network* New York USA <http://mpra.ub.uni-muenchen.de/50235/> , <http://ssrn.com/abstract=2594333> .
- 853.** Ledenyov D O, Ledenyov V O 2013h Tracking and replication of hedge fund optimal investment portfolio strategies in global capital markets in presence of nonlinearities *MPRA Paper no 51176* Munich University Munich Germany pp 1 – 92, *SSRN Paper no SSRN-id2588380* *Social Sciences Research Network* New York USA

- <http://mpra.ub.uni-muenchen.de/51176/> ,
<http://ssrn.com/abstract=2588380> .
- 854.** Ledenyov D O, Ledenyov V O 2013i Venture capital optimal investment portfolio strategies selection in diffusion - type financial systems in global capital markets with nonlinearities *MPRA Paper no 51903* Munich University Munich Germany pp 1 – 81, , *SSRN Paper no SSRN-id2592989 Social Sciences Research Network* New York USA
<http://mpra.ub.uni-muenchen.de/51903/> ,
<http://ssrn.com/abstract=2592989> .
- 855.** Ledenyov D O, Ledenyov V O 2014a Mergers and acquisitions transactions strategies in diffusion - type financial systems in highly volatile global capital markets with nonlinearities *MPRA Paper no 61946* Munich University Munich Germany, *SSRN Paper no SSRN-id2561300 Social Sciences Research Network* New York USA pp 1 – 160
<http://mpra.ub.uni-muenchen.de/61946/> ,
<http://ssrn.com/abstract=2561300> .
- 856.** Ledenyov D O, Ledenyov V O 2014b Strategies on initial public offering of company equity at stock exchanges in imperfect highly volatile global capital markets with induced nonlinearities *MPRA Paper no 53780* Munich University Munich Germany, *SSRN Paper no SSRN-id2577767 Social Sciences Research Network* New York USA pp 1 – 138
<http://mpra.ub.uni-muenchen.de/53780/> ,
<http://ssrn.com/abstract=2577767> .
- 857.** Ledenyov D O, Ledenyov V O 2014c On the winning virtuous strategies for ultra high frequency electronic trading in foreign currencies exchange markets *MPRA Paper no 61863* Munich University Munich Germany, *SSRN Paper no SSRN-id2560297 Social Sciences Research Network* New York USA pp 1 – 175
<http://mpra.ub.uni-muenchen.de/61863/> ,
<http://ssrn.com/abstract=2560297> .
- 858.** Ledenyov D O, Ledenyov V O 2014d On the fundamentals of winning virtuous strategies creation toward leveraged buyout transactions implementation during private equity investment in conditions of resonant absorption of discrete information in diffusion - type financial system with induced nonlinearities *MPRA Paper no 61805* Munich University Munich Germany pp 1 – 161, *SSRN Paper no SSRN-id2559168 Social Sciences Research Network* New York USA
<http://mpra.ub.uni-muenchen.de/61805/> ,
<http://ssrn.com/abstract=2559168> .

- 859.** Ledenyov D O, Ledenyov V O 2014e *MicroFX* foreign currencies ultra high frequencies trading software platform with embedded optimized Stratonovich – Kalman - Bucy filtering algorithm, particle filtering algorithm, macroeconomic analysis algorithm, market microstructure analysis algorithm, order flow analysis algorithm, comparative analysis algorithm, and artificial intelligence algorithm for near-real-time decision making / instant switching on / between optimal trading strategies *ECE James Cook University* Townsville Australia, Kharkov Ukraine.
- 860.** Ledenyov D O, Ledenyov V O 2014f *MicroLBO* software program with the embedded optimized near-real-time artificial intelligence algorithm to create winning virtuous strategies toward leveraged buyout transactions implementation and to compute direct/reverse leverage buyout transaction default probability number for selected public/private companies during private equity investment in conditions of resonant absorption of discrete information in diffusion - type financial system with induced nonlinearities *ECE James Cook University* Townsville Australia, Kharkov Ukraine.
- 861.** Ledenyov D O, Ledenyov V O 2015a Nonlinearities in microwave superconductivity 8th edition *Cornell University* NY USA pp 1 – 923
[www.arxiv.org/1206.4426v7.pdf](http://www.arxiv.org/abs/1206.4426v7) .
- 862.** Ledenyov D O, Ledenyov V O 2015b Winning virtuous strategy creation by interlocking interconnecting directors in boards of directors in firms in information century *MPRA Paper no 61681* Munich University Munich Germany, *SSRN Paper no SSRN-id2553938* *Social Sciences Research Network* New York USA pp 1 – 108
<http://mpra.ub.uni-muenchen.de/61681/> ,
<http://ssrn.com/abstract=2553938> .
- 863.** Ledenyov D O, Ledenyov V O 2015c Information theory of firm *MPRA Paper no 63380* Munich University Munich Germany, *SSRN Paper no SSRN-id2587716* *Social Sciences Research Network* New York USA pp 1 – 185
<http://mpra.ub.uni-muenchen.de/63380/> ,
<http://ssrn.com/abstract=2587716> .
- 864.** Ledenyov D O, Ledenyov V O 2015d Information money fields of cyclic oscillations in nonlinear dynamic economic system *MPRA Paper no 63565* Munich University Munich Germany, *SSRN Paper no SSRN-id2592975* *Social Sciences Research Network* New York USA pp 1 – 40
<http://mpra.ub.uni-muenchen.de/63565/> ,
<http://ssrn.com/abstract=2592975> .

- 865.** Ledenyov D O, Ledenyov V O 2015e On the spectrum of oscillations in economics *MPRA Paper no 64368* Munich University Munich Germany, *SSRN Paper no SSRN-id2606209 Social Sciences Research Network* New York USA pp 1 – 48
<http://mpra.ub.uni-muenchen.de/64368/> ,
<http://ssrn.com/abstract=2606209> .
- 866.** Ledenyov D O, Ledenyov V O 2015f Digital waves in economics *MPRA Paper no 64755* Munich University Munich Germany, *SSRN Paper no SSRN-id2613434 Social Sciences Research Network* New York USA pp 1 – 55
<http://mpra.ub.uni-muenchen.de/64755/> ,
<http://ssrn.com/abstract=2613434> .
- 867.** Ledenyov D O, Ledenyov V O 2015g General information product theory in economics science *MPRA Paper no 64991* Munich University Munich Germany, *SSRN Paper no SSRN-id2617310 Social Sciences Research Network* New York USA pp 1 – 54
<http://mpra.ub.uni-muenchen.de/64991/> ,
<http://ssrn.com/abstract=2617310> .
- 868.** Ledenyov D O, Ledenyov V O 2015h Quantum macroeconomics theory *MPRA Paper no 65566* Munich University Munich Germany, *SSRN Paper no SSRN-id2627086 Social Sciences Research Network* New York USA pp 1 – 55
<http://mpra.ub.uni-muenchen.de/65566/> ,
<http://ssrn.com/abstract=2627086> .
- 869.** Ledenyov D O, Ledenyov V O 2015i Wave function in economics *MPRA Paper no 66577* Munich University Munich Germany, *SSRN Paper no SSRN-id2659054 Social Sciences Research Network* New York USA pp 1 – 71
<http://mpra.ub.uni-muenchen.de/66577/> ,
<http://ssrn.com/abstract=2659054> .
- 870.** Ledenyov D O, Ledenyov V O 2015j Quantum microeconomics theory *MPRA Paper no 67010* Munich University Munich Germany, *SSRN Paper no SSRN-id2667016 Social Sciences Research Network* New York USA pp 1 – 71
<http://mpra.ub.uni-muenchen.de/67010/> ,
<http://ssrn.com/abstract=2667016> .
- 871.** Ledenyov D O, Ledenyov V O 2015k Quantum theory of firm *MPRA Paper no 67162* Munich University Munich Germany, *SSRN Paper no SSRN-id2672288 Social Sciences Research Network* New York USA pp 1 – 73
<http://mpra.ub.uni-muenchen.de/67162/> ,

- <http://ssrn.com/abstract=2672288> .
- 872.** Ledenyov D O, Ledenyov V O 2015l Wave function method to forecast foreign currencies exchange rates at ultra high frequency electronic trading in foreign currencies exchange markets *MPRA Paper no 67470* Munich University Munich Germany, *SSRN Paper no SSRN-id2681183 Social Sciences Research Network* New York USA pp 1 – 156
<http://mpra.ub.uni-muenchen.de/67470/> ,
<http://ssrn.com/abstract=2681183> .
- 873.** Ledenyov D O, Ledenyov V O 2015m Quantum money *MPRA Paper no 67982* Munich University Munich Germany, *SSRN Paper no SSRN-id2693128 Social Sciences Research Network* New York USA pp 1 – 70
<http://mpra.ub.uni-muenchen.de/67982/> ,
<http://ssrn.com/abstract=2693128> .
- 874.** Ledenyov D O, Ledenyov V O 2015n Quantum strategy creation by interlocking interconnecting directors in boards of directors in modern organizations at time of globalization *MPRA Paper no 68404* Munich University Munich Germany, *SSRN Paper no SSRN-id2704417 Social Sciences Research Network* New York USA pp 1 – 104
<http://mpra.ub.uni-muenchen.de/68404/> ,
<http://ssrn.com/abstract=2704417> .
- 875.** Ledenyov D O, Ledenyov V O 2015o *MicroID* software program with the embedded optimized near-real-time artificial intelligence algorithm to create the winning virtuous business strategies and to predict the director's election / appointment in the boards of directors in the firms, taking to the consideration both the director's technical characteristics and the interconnecting interlocking director's network parameters in conditions of the resonant absorption of discrete information in diffusion - type financial economic system with induced nonlinearities *ECE James Cook University Townsville Australia, Kharkov Ukraine*.
- 876.** Ledenyov D O, Ledenyov V O 2015p *MicroITF* operation system and software programs: **1)** the operation system to control the firm operation by means of the information resources near-real-time processing in the modern firms in the case of the diffusion - type financial economic system with the induced nonlinearities; **2)** the software program to accurately characterize the director's performance by means of a) the filtering of the generated/transmitted/received information by the director into the separate virtual channels, depending on the information content, and b) the measurement of the levels of signals in every virtual channel with the generated/transmitted/received information by the director, in

the overlapping interconnecting interlocking directors networks in the boards of directors in the firms during the Quality of Service (QoS) measurements process; and **3**) the software program to create the winning virtuous business strategies by the interlocking interconnecting directors in the boards of directors in the modern firms in the case of the diffusion - type financial economic system with the induced nonlinearities, using the patented recursive artificial intelligence algorithm *ECE James Cook University Townsville Australia, Kharkov Ukraine*.

877. Ledenyov D O, Ledenyov V O 2015r *MicroIMF* software program: the *MicroIMF* software program to make the computer modeling of **1**) the interactions between the information money fields of one cyclic oscillation and the information money fields of other cyclic oscillation(s) in the nonlinear dynamic economic system, **2**) the interactions between the information money fields of cyclic oscillation and the nonlinear dynamic economic system itself, and **3**) the density distributions of the information money fields by different cyclic oscillations (the economic continuous waves) in the nonlinear dynamic economic system *ECE James Cook University Townsville Australia, Kharkov Ukraine*.

878. Ledenyov D O, Ledenyov V O 2015s *MicroSA* software program **1**) to perform the spectrum analysis of the cyclic oscillations of the economic variables in the nonlinear dynamic economic system, including the discrete-time signals and the continuous-time signals; **2**) to make the computer modeling and to forecast the business cycles for **a**) the central banks with the purpose to make the strategic decisions on the monetary policies, financial stability policies, and **b**) the commercial/investment banks with the aim to make the business decisions on the minimum capital allocation, countercyclical capital buffer creation, and capital investments *ECE James Cook University Townsville Australia, Kharkov Ukraine*.

Probability Theory, Statistics Theory, Spectrum Analysis Theory, Brownian Movement Theory, Diffusion Theory, Chaos Theory, Information Communication Theory in Econometrics and Econophysics Sciences:

879. Huygens 1657 *De ratiociniis in aleae ludo* (On calculations in games of chance).

880. Bernoulli J 1713 *Ars conjectandi* (The art of guessing).

881. Bernoulli D 1738, 1954 *Specimen theoriae novae de mensura sortis Commentarii Academiae Scientiarum Imperialis Petropolitanae* Petropoli vol **5** pp 175 – 192; Exposition of a new theory on the measurements of risk Sommer L (translator) *Econometrica* vol **22** pp 23 – 36.

882. De Moivre 1730 *Miscellanea analytica supplementum* (The analytic method).

883. Fourier J-B J 1807-1822, 1878, 2009 *Théorie Analytique de la Chaleur Firmin Didot, Cambridge University Press* ISBN 978-1-108-00178-6, ISBN 978-1-108-00180-9.
884. Fourier J-B J 1824 *Mémoires de l'Académie Royale des Sciences de l'Institut de France VII* pp 570 – 604
http://www.academie-sciences.fr/activite/archive/dossiers/Fourier/Fourier_pdf/Mem1827_p569_604.pdf .
885. De Laplace 1812 *Théorie analytique des probabilités Paris France*.
886. Bunyakovsky V Ya 1825 Rotary motion in a resistant medium of a set of plates of constant thickness and defined contour around an axis inclined with respect to the horizon *Ph D Thesis no 1* under Prof. Augustin - Louis Cauchy supervision *École Polytechnique Paris France*.
887. Bunyakovsky V Ya 1825 Determination of the radius-vector in elliptical motion of planets *Ph D Thesis no 2* under Prof. Augustin - Louis Cauchy supervision *École Polytechnique Paris France*.
888. Bunyakovsky V Ya 1825 Heat propagation in solids *Ph D Thesis no 3* under Prof. Augustin - Louis Cauchy supervision *École Polytechnique Paris France*.
889. Bunyakovsky V Ya 1846 *Foundations of the mathematical theory of probability St. Petersburg Russian Federation*.
890. Connor J J, Robertson E F (July) 2000 Viktor Yakovlevich Bunyakovsky (December 16, 1804 - December 12, 1889) *School of Mathematics and Statistics University of St Andrews Scotland UK*
<http://www-history.mcs.st-andrews.ac.uk/Biographies/Bunyakovsky.html> .
891. V Ya Bunyakovsky *International Conference* (August 20 - 21) 2004 Private communications with conference participants on V Ya Bunyakovsky's mathematical theory of probability and its applications in econophysics and econometrics during a tour to Town of Bar Vynnytsia Region Ukraine *V Ya Bunyakovsky International Conference Institute of Mathematics of National Academy of Sciences of Ukraine (NASU) Kyiv Ukraine* www.imath.kiev.ua/~syta/bunyak .
892. Chebyshev P L 1846 An experience in the elementary analysis of the probability theory *Crelle's Journal fur die Reine und Angewandte Mathematik*.
893. Chebyshev P L 1867 Des valeurs moyennes *Journal de Math'ematics Pures et Appliqu'ees* vol 12 pp 177 – 184.
894. Chebyshev P L 1891 Sur deux theoremes relatifs aux probabilités *Acta Mathematica* vol 14.

- 895.** Chebyshev P L 1936 Theory of probability: Lectures given in 1879 and 1880 Lyapunov A N (lecture notes writer) Krylov A N (editor) *Moscow - St Petersburg* Russian Federation.
- 896.** Markov A A 1890 On one problem by D I Mendeleev *Zapiski Imperatorskoi Akademii Nauk SPb* **62** pp 1 – 24.
- 897.** Markov A A 1899 Application des fonctions continues au calcul des probabilités *Kazan Bulletin* **9** (2) pp 29 – 34 Russian Federation.
- 898.** Markov A A 1900, 1912, 1913 Calculation of probabilities *St Petersburg* Russian Federation; Wahrscheinlichkeits-Rechnung *Teubner* Leipzig-Berlin Germany; 3rd edition *St Petersburg* Russian Federation.
- 899.** Markov A A 1906 Extension of law of big numbers on variables, depending from each other *Izvestiya Fiziko-Matematicheskogo Obschestva pri Kazanskom Universitete* 2nd series vol **15** (94) pp 135 – 156 Russian Federation.
- 900.** Markov A A 1907, 1910 Research on fine case of depending trials *Izvestiya Akademii Nauk SPb* 6th series vol **1** (93) pp 61 – 80; Recherches sur un cas remarquable d'épreuves dependantes *Acta Mathematica* **33** pp 87 – 104 Stockholm Sweden.
- 901.** Markov A A 1908, 1912, 1971 Extension of limit theorems of calculation of probabilities to sum of variables, connected in chain *Zapiski Akademii Nauk po Fiziko-Matematicheskomu Otdeleniyu* 8th series vol **25** (3); Ausdehnung der Satze uber die Grenzwerte in der Wahrscheinlichkeitsrechnung auf eine Summe verketteter Grossen Liebmann H (translator) in *Wahrscheinlichkeitsrechnung* Markov A A (author) pp 272 – 298 *Teubner B G* Leipzig Germany; Extension of the limit theorems of probability theory to a sum of variables connected in a chain Petelin S (translator) in *Dynamic probabilities systems* Howard R A (editor) vol **1** pp 552 – 576 *John Wiley and Sons Inc* New York USA.
- 902.** Markov A A 1910 Research on common case of trials, connected in chain *Zapiski Akademii Nauk po Fiziko-Matematicheskomu Otdeleniyu* 8th series vol **25** (93) Russian Federation.
- 903.** Markov A A 1911 On one case of trials, connected in complex chain *Izvestiya Akademii Nauk SPb* 6th series vol **5** (93) pp 171 – 186 Russian Federation.
- 904.** Markov A A 1912 On trials of connected in chain unobserved events *Izvestiya Akademii Nauk SPb* 6th series vol **6** (98) pp 551 – 572 Russian Federation.
- 905.** Markov A A 1913 Example of statistical research on text of “Eugene Onegin”, illustrating interconnection of trials in chain *Izvestiya Akademii Nauk SPb* 6th series vol **7** (93) pp 153 – 162 Russian Federation.

- 906.** Fisher I 1892 Mathematical investigations in the theory of value and prices *Transactions of the Connecticut Academy* **9** pp 1 – 124.
- 907.** Einstein A 1905 On the movement of small particles suspended in a stationary liquid demanded by the molecular-kinetic theory of heat *Annalen der Physik* **17** pp 549 – 560.
- 908.** Einstein A 1956 Investigation on the theory of the Brownian motion Furth R (editor) *Dover* New York USA.
- 909.** Einstein A, Smolukhovskiy M 1936 Brownian movement: Collection of research papers *ONTI* Moscow Russian Federation.
- 910.** Slutsky E E 1910 Theory of marginal utility *M Sc Thesis* Vernadsky National Library Kiev Ukraine.
- 911.** Slutsky E E 1912 Theory of correlation and elements of study about distribution curves *Kiev Commerce Institute Bulletin* **16** pp 1 – 208 Kiev Ukraine.
- 912.** Slutsky E E 1913 On the criterion of goodness of fit of the regression lines and the best method of fitting them to the data *Journal Royal Statistics Society* vol **77** part I pp 8 – 84.
- 913.** Slutsky E E 1914 Sir William Petty: Short overview of his economic visions with attachment of his several important research works *Kiev Commerce Institute Bulletin* **18** pp 5 – 48 Kiev Ukraine.
- 914.** Slutsky E E 1915 Sulla teoria del bilancio del consumatore *Giornale degli economisti e rivista di statistica* **51** no 1 pp 1 – 26 Italy.
- 915.** Slutsky E E 1922a Statistics and mathematics. Review of Kaufman *Statistics Bulletin* **3 – 4** pp 104 – 120.
- 916.** Slutsky E E 1922b To the question of logical foundations of probability calculation *Statistics Bulletin* **9 - 12** pp 13 – 21.
- 917.** Slutsky E E 1923a On the some patterns of correlation connection and the systematic error of correlation coefficient *Statistics Bulletin* **1 – 3** pp 31 – 50.
- 918.** Slutsky E E 1923b On a new coefficient of mean density of population *Statistics Bulletin* **4 – 6** pp 5 – 19.
- 919.** Slutsky E E 1923c On calculation of state revenue from emission of paper money *Local Economy* **2** pp 39 – 62 Kiev Ukraine.
- 920.** Slutsky E E 1925a On the law of large numbers *Statistics Bulletin* **7 – 9** pp 1 – 55.
- 921.** Slutsky E E 1925b Ueber stochastische Asymptoten und Grenzwerte *Metron* Padova Italy vol **5** no 3 pp 3 – 89.

922. Slutski E E 1926 Ein Beitrag zur Formal-praxeologischen Grundlegung der Oekonomie
Ann de la classe des sci soc-econ Akad Oukrainienne des Sciences Kiev Ukraine vol **4**
pp 3 – 12.
923. Slutsky E E 1927a The summation of random causes as sources of cyclic processes
Problems of Conjuncture (Voprosy Kon'yunktury) vol **3** issue 1 pp 34 – 64 Moscow Russian
Federation.
924. Slutski E E 1927b Zur Kritik des Bohm-Bawerkschen Wertbegriffs und seiner Lehre von
der Messbarkeit des Wertes *Schmollers Jb* **51** (4) pp 37 – 52.
925. Slutsky E E 1929 Sur l'erreur quadratique moyenne du coefficient de correlation dans le
cas des suites des epreuves non independantes *Comptes rendus* **189** pp 612 – 614.
926. Slutsky E E 1935 To the extrapolation problem in connection with forecast problem
Geophysics Journal **5** (3) pp 263 – 277.
927. Slutsky E E 1937a Quelle propositione relative alla teoria delle funzioni aleatorie
Giornale dell Istituto Italiano degli Attuari **8** no 2 pp 3 – 19.
928. Slutsky E E 1937b The summation of random causes as the source of cyclical processes
Econometrica **5** pp 105 – 146.
929. Slutsky E E 1942, 1999 Autobiography of December 3, 1942 *Economics School* **5**
pp 18 – 21.
930. Slutsky E E 1960 Selected research works (Izbrannye trudy) *Academy of Sciences of
USSR Moscow Russian Federation*.
931. Bowley A L 1924 The mathematical groundwork of economic *Clarendon Press Oxford
UK*.
932. Kolmogorov A N 1937 Markov chains with countable many states *Bulletin Moscow
University* **1**.
933. Kolmogorov A N 1938 On analytic methods in probability theory *in* Selected works of
Kolmogorov A N vol **2** Probability theory and mathematical statistics Shiryaev A N (editor)
Springer Germany.
934. Kolmogorov A N 1947 The contribution of Russian science to the development of
probability theory *Uchenye Zapiski Moskovskogo Universiteta* no 91.
935. Kolmogorov A N 1956 Probability theory in Mathematics: Its contents, methods, and
meaning *Academy of Sciences USSR* vol **2**.
936. Kolmogorov A N 1956 Foundations of the theory of probability *Chelsea New York USA*.
937. Kolmogorov A N 1985 Mathematics and mechanics Selected works vol **1** *Nauka
Publishing House Moscow Russian Federation*.

938. Kolmogorov A N 1986 Probability theory and mathematical statistics Selected works vol 2 *Nauka Publishing House* Moscow Russian Federation.
939. Allen R G D 1938 Mathematical analysis for economists *Macmillan* London UK.
940. Cramer H 1940 On the theory of stationary random processes *Ann Math* vol 41 pp 215 – 230.
941. Cramer H 1946 Mathematical methods of statistics *Princeton University Press* USA.
942. Cramer H, Leadbetter M 1967 Stationary and related stochastic processes. Sample function properties and their applications *John Wiley and Sons Inc* NY USA.
943. Bemshtein S N 1946 Theory of probability 4th edition *Gostehizdat* Moscow Russian Federation.
944. Bogolyubov N N 1946 Dynamic problems in statistic physics.
945. Neyman J, Scott E L 1948 Consistent estimates based on partially consistent observations *Econometrica* 16 pp 1 – 32.
946. Shannon C E 1948 A mathematical theory of communication *Bell System Technical Journal* 27 pp 379 – 423 and pp 623 – 656.
947. Terletsky Ya P 1950 Dynamic and statistic laws of physics *Publishing House of Moscow State University* Russian Federation pp 1 – 96.
948. Hannan E J 1960 Time series analysis *Methuen* London.
949. Hannan E J 1970 Multiple time series *John Wiley and Sons Inc* New York USA.
950. Mandelbrot B B 1960 The Pareto-Levy law and the distribution of income *International Economic Review* no 1.
951. Mandelbrot B B 1963a The stable Paretian income distribution when the apparent exponent is near two *International Economic Review* no 4.
952. Mandelbrot B B 1963b The variation of certain speculative prices *Journal of Business* vol 36 pp 394 – 419.
953. Mandelbrot B B 1965 Une classe de processus stochastiques homothetiques a soi: Application a la loi climatologique de H. E. Hurst *Comptes Rendus de l'Academie des Sciences* vol 240 pp 3274 – 3277 Paris France.
954. Mandelbrot B B 1967a The variation of some other speculative prices *Journal of Business* vol 40 pp 393 – 413.
955. Mandelbrot B B (April) 1967b Some noises with 1/f spectrum: A bridge between direct current and white noise *IEEE Transactions on Information Theory* USA.
956. Mandelbrot B B, Taylor H M 1967 On the distribution of stock price difference *Operations Research* vol 15 no 6 pp 1057 – 1062.

957. Mandelbrot B B, van Ness J W 1968 Fractional Brownian motions, fractional noises and applications *SIAM Review* vol **10** no 4 pp 422 – 437.
958. Mandelbrot B B 1969 Robustness of the rescaled range R/S in the measurement of non-cyclic long-run statistical dependence *Water Resources Research* vol **5** no 5 pp 967 – 988.
959. Mandelbrot B B, Wallis J R 1969 Computer experiments with fractional Gaussian noises I, II, III *Water Resources Research* vol **5** pp 228 – 267.
960. Mandelbrot B B 1971 When can price be arbitrated efficiently? A limit of the validity of the random walk and martingale models *Review of Economics and Statistics* vol **53** pp 225 – 236.
961. Mandelbrot B B 1972 Statistical methodology for non-periodic cycles: From the covariance to R/S analysis *Annals of Economic and Social Measurement* vol **1** no 3 pp 259 – 290.
962. Mandelbrot B B 1975a Les objets fractals *Flammarion* Paris France.
963. Mandelbrot B B 1975b Limit theorems on the self-normalized range for weakly and strongly dependent process *Zeitschrift Wahrscheinlichkeitstheorie und Verwandte Gebiete* vol **31** pp 271 – 285.
964. Mandelbrot B B 1977 Fractals: Form, chance and dimension *W H Freeman* San Francisco USA.
965. Mandelbrot B B 1982 The fractal geometry of nature *W H Freeman* San Francisco USA.
966. Mandelbrot B B 1997 Fractals and scaling in finance *Springer* New York USA.
967. Gnedenko B V, Khinchin A Ya 1961 An elementary introduction to the theory of probability *Freeman* San Francisco USA.
968. Gnedenko B V 1988 The theory of probability *Mir* Moscow Russian Federation.
969. Shiryayev A N 1961 The problem of the most rapid detection of a disturbance in a stationary process *Soviet Mathematical Doklady* **2** pp 795 – 799.
970. Shiryayev A N 1963 On optimal methods in quickest detection problems *Theory of Probability and its Applications* **8** (1) pp 22 – 46.
971. Shiryayev A N 1964 On Markov sufficient statistics in non-additive Bayes problems of sequential analysis *Theory of Probability and its Applications* **9** (4) pp 670 – 686.
972. Shiryayev A N 1965 Some exact formulas in a 'disorder' problem *Theory of Probability and its Applications* **10** pp 348 – 354.
973. Grigelionis B I, Shiryayev A N 1966 On Stefan's problem and optimal stopping rules for Markov processes *Theory of Probability and its Applications* **11** pp 541 – 558.

- 974.** Shiryaev A N 1967 Two problems of sequential analysis *Cybernetics* **3** pp 63 – 69.
- 975.** Liptser R S, Shiryaev A N 1977 Statistics of random processes *Springer-Verlag* New York USA.
- 976.** Shiryaev A N 1972 Random processes *Moscow State University Press* Russian Federation.
- 977.** Shiryaev A N 1973, 1974 Probability, statistics, random processes *Moscow State University Press* vols **1, 2** Russian Federation.
- 978.** Shiryaev A N 1978, 2008b Optimal stopping rules 1st edition, 3rd edition *Springer* ISSN 0172-4568 *Library of Congress Control Number: 2007934268* Berlin Germany pp 1 – 217.
- 979.** Shiryaev A N 1988 Probability *Springer-Verlag* Berlin Heidelberg Germany.
- 980.** Shiryaev A N 1995 Probability 2nd edition *Springer - Verlag* ISBN 0-387-94549-0 New York USA pp 1 – 621.
- 981.** Shiryaev A N 1998a Foundations of stochastic financial mathematics vol **1** *Fazis Scientific and Publishing House* Moscow Russian Federation ISBN 5-7036-0044-8 pp 1 – 492.
- 982.** Shiryaev A N 1998b Foundations of stochastic financial mathematics vol **2** *Fazis Scientific and Publishing House* Moscow Russian Federation ISBN 5-7036-0044-8 pp 493 – 1017.
- 983.** Shiryaev A N 1999 Essentials of stochastic finance: Facts, models, theory *Advanced Series on Statistical Science & Applied Probability* vol **3** *World Scientific Publishing Co Pte Ltd* Kruzhilin N (translator) ISBN 981-02-3605-0 Singapore pp 1 – 834.
- 984.** Shiryaev A N, Spokoiny V G 2000 Statistical experiments and decisions: Asymptotic theory *World Scientific Publishing Co Pte Ltd* ISBN 9810241011 Singapore pp 1 – 283.
- 985.** Gravarsen S E, Peskir G, Shiryaev A N 2001 Stopping Brownian motion without anticipation as close as possible to its ultimate maximum *Theory of Probability and its Applications* **45** pp 125 – 136 MR1810977
<http://www.ams.org/mathscinetgetitem?mr=1810977> .
- 986.** Kallsen J, Shiryaev A N 2001 Time change representation of stochastic integrals *Theory of Probability and its Applications* **46** pp 579 – 585 MR1978671
<http://www.ams.org/mathscinet-getitem?mr=1978671> .
- 987.** Kallsen J, Shiryaev A N 2002 The cumulant process and Esscher's change of measure *Finance Stoch* **6** pp 397 – 428 MR1932378
<http://www.ams.org/mathscinetgetitem?mr=1932378> .

- 988.** Shiryaev A N 2002 Quickest detection problems in the technical analysis of the financial data *Proceedings Mathematical Finance Bachelier Congress Paris France (2000)* Springer Germany pp 487 – 521 MR1960576
<http://www.ams.org/mathscinet-getitem?mr=1960576> .
- 989.** Jacod J, Shiryaev A N 2003 Limit theorems for stochastic processes *2nd edition* Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences] **288** Springer Berlin Germany MR1943877
<http://www.ams.org/mathscinet-getitem?mr=1943877> .
- 990.** Shiryaev A N 2004 Kolmogorov and modern mathematics *International Conference at Mathematical Institute named after V A Steklov June 16-21, 2003* Russian Academy of Sciences Moscow Russian Federation ISBN 5-98419-003-6 pp 1 – 195.
- 991.** Shiryaev A N, Grossinho M R, Oliveira P E, Esquivel M L (editors) 2006 Stochastic finance Springer Germany ISBN-10:0-387-28262-9 pp 1 – 364.
- 992.** Peskir G, Shiryaev A N 2006 Optimal stopping and free-boundary problems *Lectures in Mathematics* ETH Zürich Birkhäuser Switzerland MR2256030
<http://www.ams.org/mathscinet-getitem?mr=2256030> .
- 993.** Feinberg E A, Shiryaev A N 2006 Quickest detection of drift change for Brownian motion in generalized Bayesian and mini-max settings *Statistics & Decisions* **24** (4) pp 445 – 470.
- 994.** Kabanov Yu, Lipster R, Stoyanov J 2006 The Shiryaev festschrift: From stochastic calculus to mathematical finance Springer Germany pp 1 – 668.
- 995.** du Toit J, Peskir G, Shiryaev A N 2007 Predicting the last zero of Brownian motion with drift *Cornell University* NY USA pp 1 – 17
<http://arxiv.org/abs/0712.3415v1>.
- 996.** Shiryaev A N 2008a Generalized Bayesian nonlinear quickest detection problems: on Markov family of sufficient statistics *Mathematical Control Theory and Finance Proceedings of the Workshop of April 10–14 2007* Lisbon Portugal Sarychev A et al (editors) Springer Berlin Germany pp 377 – 386.
- 997.** Eberlein E, Papapantoleon A, Shiryaev A N 2008 On the duality principle in option pricing: Semimartingale setting *Finance Stoch* **12** pp 265 – 292
<http://www.ams.org/mathscinet-getitem?mr=2390191> .
- 998.** Shiryaev A N, Novikov A A 2009 On a stochastic version of the trading rule "Buy and hold" *Statistics & Decisions* **26** (4) pp 289 – 302.

- 999.** Eberlein E, Papapantoleon A, Shiryaev A N 2009 Esscher transform and the duality principle for multidimensional semimartingales *The Annals of Applied Probability* vol **19** no 5 pp 1944 – 1971 <http://dx.doi.org/10.1214/09-AAP600> <http://arxiv.org/abs/0809.0301v5> .
- 1000.** Shiryaev A N, Zryumov P Y 2009 On the linear and nonlinear generalized Bayesian disorder problem (discrete time case) optimality and risk – modern trends in mathematical finance *The Kabanov Festschrift* Delbaen F et al (editors) *Springer* Berlin Germany pp 227 – 235.
- 1001.** Gapeev P V, Shiryaev A N 2010 Bayesian quickest detection problems for some diffusion processes *Cornell University NY USA* pp 1 – 25 <http://arxiv.org/abs/1010.3430v2> .
- 1002.** Karatzas I, Shiryaev A N, Shkolnikov M 2011 The one-sided Tanaka equation with drift *Cornell University NY USA*
<http://arxiv.org/abs/1108.4069v1> .
- 1003.** Shiryaev A N, Zhitlukhin M V 2012 Optimal stopping problems for a Brownian motion with a disorder on a finite interval *Cornell University NY USA* pp 1 – 10 <http://arxiv.org/abs/1212.3709v1> .
- 1004.** Zhitlukhin M V, Shiryaev A N 2012 Bayesian disorder detection problems on filtered probability spaces *Theory of Probability and Its Applications* **57** (3) pp 453 – 470.
- 1005.** Feinberg E A, Mandava M, Shiryaev A N 2013 On solutions of Kolmogorov's equations for nonhomogeneous jump Markov processes *Cornell University NY USA* pp 1 – 15 <http://arxiv.org/abs/1301.6998v3> .
- 1006.** Abramowitz M, Stegun I A (editors) 1964 Handbook of mathematical functions *National Bureau of Standards Applied Mathematics Series* vol **55** USA.
- 1007.** Kubilius J 1964 Probabilistic methods in the theory of numbers *American Mathematical Society Providence USA*.
- 1008.** Akhiezer N I, Glazman I M 1966 Theory of linear operators in Hilbert space *Nauka Moscow Russian Federation*.
- 1009.** Lamperti J 1966 Probability *Benjamin* New York USA.
- 1010.** Kai-Lai Chung 1967 Markov chains with stationary transition probabilities *Springer-Verlag* New York USA.
- 1011.** Skorohod A V 1967 Random processes with independent increments *Nauka Moscow Russian Federation*.
- 1012.** Gikhman I I, Skorohod A V 1968 Stochastic differential equations *Naukova Dumka* Kiev Ukraine.

- 1013.** Gikhman I I, Skorohod A V 1969 Introduction to the theory of random processes 1st edition *Saunders* Philadelphia USA.
- 1014.** Gikhman I I, Skorohod A V 1974-1979 Theory of stochastic processes vols **1, 2, 3** *Springer-Verlag* New York-Berlin USA-Germany.
- 1015.** Breiman L 1968 Probability *Addison-Wesley* Reading MA USA.
- 1016.** Feller W 1968 An introduction to probability theory and its applications vols **1, 2** 3rd edition *John Wiley and Sons Inc* New York USA.
- 1017.** Brush S G 1968, 1977 A history of random processes: 1. Brownian movement *in* Study history statistics and probability Kendall M G, Plackett R L (editors) **2** pp 347 – 382 London UK.
- 1018.** Glesjer H 1969 A new test for heteroskedasticity *Journal of the American Statistical Association* **64** pp 316 – 323.
- 1019.** Ash R B 1970 Basic probability theory *John Wiley and Sons Inc* New York USA.
- 1020.** Ash R B 1972 Real analysis and probability *Academic Press* New York USA.
- 1021.** Ash R B, Gardner M F 1975 Topics in stochastic processes *Academic Press* New York USA.
- 1022.** Box G E P, Jenkins G M 1970 Time series analysis: Forecasting and control *Holden Day* San Francisco California USA.
- 1023.** Renyi A 1970 Probability theory *North-Holland Publishing Company* Amsterdam The Netherlands.
- 1024.** Isihara A 1971 Statistical physics *Academic Press* New York USA.
- 1025.** Brent R P 1973 Algorithms for minimization without derivatives *Englewood Cliffs* USA.
- 1026.** Rubin D B 1974 Estimating causal effects of treatments in randomized and nonrandomized studies *Journal of Educational Psychology* **55** (5) pp 688 – 701.
- 1027.** Borovkov A A 1976 Wahrscheinlichkeitstheorie: Eine EinjUhrung 1st edition *Birkhiuser* Basel-Stuttgart Switzerland-Germany.
- 1028.** Grangel C W J, Newbold P 1977 Forecasting economic time series *Academic Press* New York USA.
- 1029.** Grangel C W J, Teräsvirta T 1993 Modeling nonlinear economic relationships *Oxford University Press* Oxford New York UK USA.
- 1030.** Pugachev V S 1979 Theory of probability and mathematical statistics 1st edition *Nauka* Moscow Russian Federation, 2nd edition *Fizmatlit* Moscow Russian Federation ISBN 5–92210254–0 pp 1 – 496.
- 1031.** Ross S M 1980 Introduction to probability models *Academic Press* New York USA.

- 1032.** Karlin S, Taylor H M 1981 A second course in stochastic processes *Academic Press* New York USA.
- 1033.** Venttsel A D 1981 A course in the theory of stochastic processes *McGraw-Hill* New York USA.
- 1034.** Maddala G S 1983 Limited-dependent and qualitative variables in econometrics *Cambridge University Press* Cambridge UK.
- 1035.** Yaglom A M, Yaglom I M 1983 Probability and information *Reidel Dordrecht*.
- 1036.** Heckman J, Singer B 1984a A method for minimizing the impact of distributional assumptions in econometric models for duration data *Econometrica* **52** pp 271 – 320.
- 1037.** Heckman J, Singer B 1984b Econometric duration analysis *Journal of Econometrics* **24** pp 63 – 132.
- 1038.** Pagan A 1984 Econometric issues in the analysis of regressions with generated regressors *International Economic Review* **25** pp 221 – 247.
- 1039.** Van Horne J C 1984 Financial market rates and flows *Prentice Hall* Englewood Cliffs NJ USA.
- 1040.** Murphy K M, Topel R H October 1985 Estimation and inference in two-step econometric models *Journal of Business and Economic Statistics* **3** pp 370 – 379.
- 1041.** Neter J, Wasserman W, Kutner M H 1985 Applied linear statistical models 2nd edition *Irwin* Homewood USA.
- 1042.** Powell J L 1986 Censored regression quantiles *Journal of Econometrics* **32** (1) pp 143 – 155.
- 1043.** Taylor S 1986 Modeling financial time series *John Willey and Sons Inc* New York USA.
- 1044.** Tong H 1986 Nonlinear time series *Oxford University Press* Oxford UK.
- 1045.** Tornqvist L, Vartia P, Vartia Y February 1985 How should relative change be measured? *American Statistician* **39** pp 43 – 46.
- 1046.** Sharkovsky A N, Maistrenko Yu L, Romanenko E Yu 1986 Differential equations and their applications *Naukova Dumka* Kiev Ukraine pp 1 – 280.
- 1047.** Newey W, West K 1987 A simple positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix *Econometrica* **55** pp 703 – 708.
- 1048.** Luukkonen R, Saikkonen P, Terasvirta T 1988 Testing linearity against smooth transition autoregressive models *Biometrika* **75** pp 491 – 499.
- 1049.** Judge G, Hill C, Griffiths W, Lee T, Lutkepohl H 1988 An introduction to the theory and practice of econometrics 2nd edition *John Wiley and Sons Inc* New York USA.

- 1050.** Hardle W 1990 Applied nonparametric regression *Econometric Society Monograph Cambridge University Press* Cambridge UK.
- 1051.** Lancaster T 1990 The econometric analysis of transition data *Cambridge University Press* Cambridge UK.
- 1052.** Tong H 1990 Nonlinear time series: A dynamical system approach *Clarendon Press* Oxford UK.
- 1053.** Johansen S 1992 Cointegration in partial systems and the efficiency of single equation analysis *Journal of Econometrics* **52** pp 389 – 402.
- 1054.** Banerjee A, Dolado J J, Galbraith J W, Hendry D F 1993 Cointegration, error correction, and the econometric analysis of nonstationary data *Oxford University Press* Oxford UK.
- 1055.** Cleveland W S 1993 Visualizing data *Hobart Press* Summit New Jersey USA.
- 1056.** Pesaran M H, Potter S M (editors) 1993 Nonlinear dynamics, chaos and econometrics *John Wiley and Sons Inc* New York USA.
- 1057.** Hamilton J D 1994 Time series analysis *Princeton University Press* Princeton, NJ USA.
- 1058.** Peters E E 1994 Fractal market analysis: Applying chaos theory to investment and economics *John Wiley and Sons Inc* New York USA.
- 1059.** Enders W 1995 Applied econometric time series *John Wiley and Sons Inc* New York USA.
- 1060.** Johansen S 1995 Likelihood based inference in co-integrated vector autoregressive models *Oxford University Press* Oxford UK.
- 1061.** Karatzas I, Shreve S 1995 Methods of mathematical finance *Columbia University Press* New York USA.
- 1062.** Moore G E 1995 Lithography and the future of Moore's law *Proceedings SPIE Symposium Optical Microlithography Conference VIII* **2440** 2.
- 1063.** Moore G E 2003 No exponential is forever – but we can delay forever *ISSCC*.
- 1064.** Campbell J Y, Lo A W, MacKinlay A C 1996 The econometrics of financial markets *Princeton University Press* Princeton USA.
- 1065.** Mosekilde E 1996 Topics in nonlinear dynamics: Applications to physics, biology and economic systems *World Scientific Publishing Pte Ltd* Singapore.
- 1066.** Rogers L C G, Talay D (editors) 1997 Numerical methods in finance *Cambridge University Press* Cambridge UK.
- 1067.** Campbell J, Lo A, MacKinlay C 1997 The econometrics of financial markets *Princeton University Press* Princeton NJ USA.

- 1068.** Greene W H 1997, 1999, 2003 *Econometric analysis* 1st edition, 4th edition, 5th edition *Prentice Hall* Upper Saddle River USA.
- 1069.** Hasem P M, Pesaran B 1997 *Working with Microfit 4.0: Interactive econometric analysis* *Oxford University Press* Oxford UK.
- 1070.** Lo A W, MacKinlay A C 1997 *The econometrics of financial markets* *Princeton University Press* Princeton New Jersey USA.
- 1071.** Anderson H M, Vahid F 1998 Testing multiple equation systems for common nonlinear factors *Journal of Econometrics* **84** pp 1 – 37.
- 1072.** Hubbard B B 1998 *The world according to wavelets* *A K Peters* Wellesley MA USA.
- 1073.** Mallat S A 1998 *Wavelet tour of signal processing* *Academic Press* San Diego CA USA.
- 1074.** Teolis A 1998 *Computational signal processing with wavelets* *Birkhauser* Switzerland.
- 1075.** Anishenko V S, Vadivasova T E, Astakhov V V 1999 *Nonlinear dynamics of chaotic and stochastic systems* *Saratov University Publishing House* Saratov Russian Federation.
- 1076.** Escribano, Jorda 1999 Improved testing and specification of smooth transition regression models *in* *Nonlinear time series analysis of economic and financial data* Rothman (editor) *Kluwer Academic Press* Amsterdam The Netherlands.
- 1077.** Hasem P M, Shin Y 1999 An autoregressive distributed lag modelling approach to cointegration analysis *in* *Econometrics and economic theory in the 20th century: The Ranger Frisch centennial symposium* Strom S, Holly A, Diamond P (editors) *Cambridge University Press* Cambridge UK
www.econ.cam.ac.uk/faculty/pesaran/ADL.pdf .
- 1078.** Hasem P M, Shin Y, Smith R J 2001 Bounds testing approaches to the analysis of level relationships *Journal of Applied Econometrics* **16** (3) pp 289 – 326.
- 1079.** Potter S 1999 *Non-linear time series modelling: An introduction* *Typescript* Federal Reserve Bank of New York NY USA.
- 1080.** Rothman (editor) 1999 *Nonlinear time series analysis of economic and financial data* *Kluwer Academic Press* Amsterdam The Netherlands.
- 1081.** Hayashi F 2000 *Econometrics* *Princeton University Press* Princeton NJ USA.
- 1082.** Durbin J, Koopman S J 2000 Time series analysis of non-Gaussian observations based on state-space models from both classical and Bayesian perspectives *Journal of Royal Statistical Society Series B* **62** pp 3 – 56.
- 1083.** Durbin J, Koopman S J 2002 A simple and efficient simulation smoother for state space time series analysis *Biometrika* **89** pp 603 – 615.

- 1084.** Durbin J, Koopman S J 2012 Time series analysis by state space methods 2nd edition *Oxford University Press* Oxford UK.
- 1085.** Ilinski K 2001 Physics of finance: Gauge modelling in non-equilibrium pricing *John Wiley and Sons Inc* New York USA ISBN-10: 0471877387 pp 1 – 300.
- 1086.** Kuznetsov S P 2001 Dynamic chaos *Izdatel'stvo Fiziko-Matematicheskoi Literatury* Moscow Russian Federation pp 1 – 296.
- 1087.** Tufte E R 2001 The visual display of quantitative information 2nd edition *Graphics Press* Cheshire CT USA.
- 1088.** Nicolau J 2002 Stationary processes that look like random walks – The bounded random walk process in discrete and continuous time *Econometric Theory* **18** pp 99 – 118.
- 1089.** Ledenyov V O, Ledenyov O P, Ledenyov D O 2002 A quantum random number generator on magnetic flux qubits *Proceedings of the 2nd Institute of Electrical and Electronics Engineers Conference IEEE-NANO 2002* Chicago Washington DC USA IEEE Catalog no 02TH86302002 Library of Congress number: 2002106799 ISBN: 0-7803-7538-6.
- 1090.** Woolridge J M 2002 Econometric analysis of cross section and panel data *MIT Press* Cambridge MA USA.
- 1091.** Koop G 2003 Bayesian econometrics *John Wiley and Sons Inc* New York USA.
- 1092.** Selover D D, Jensen R V, J. Kroll J 2003 *Studies in Nonlinear Dynamics & Econometrics* 7 1.
- 1093.** Davidson R, MacKinnon J 2004 Econometric theory and methods *Oxford University Press* Oxford UK.
- 1094.** Cameron A C, Trivedi P K 2005 Microeconometrics: Methods and applications *Cambridge University Press* Cambridge UK.
- 1095.** Protter P E 2005 Stochastic integration and differential equations *Springer* Germany.
- 1096.** Backhaus K et al 2006 Multivariate analysemethoden. Eine anwendungsorientierte einföhrung *Springer* Berlin Heidelberg Germany.
- 1097.** Damodaran A 2006 Applied corporate finance. A user' manual 2nd edition *John Wiley & Sons Inc* New Jersey USA.
- 1098.** Ernst D, Häcker J 2007 Applied international corporate finance *Vahlen* München Germany.
- 1099.** Angrist J D, Pischke J-S 2008 Mostly harmless econometrics: An empiricist's companion *Princeton University Press* USA.
- 1100.** Vialar Th, Goergen A 2009 Complex and chaotic nonlinear dynamics *Springer-Verlag* Berlin Heidelberg Germany ISBN 978-3-540-85977-2 pp 1 – 752.

Weatherall J O 2013 Physics of Wall Street *Houfton* New York USA.

Quantum Physics, Quantum Electronics, Quantum Computing, Quantum Mechanics:

- 1101.** Planck M 1900a Über eine Verbesserung der Wienschen Spektralgleichung On an improvement of Wien's equation for the spectrum *Verhandlungen der Deutschen Physikalischen Gesellschaft* **2** pp 202 – 204
<http://archive.org/stream/verhandlungende01goog#page/n212/mode/2up> .
- 1102.** Planck M 1900b Zur Theorie des Gesetzes der Energieverteilung im Normalspektrum *Verhandlungen der Deutschen Physikalischen Gesellschaft* **2** p 237
<http://archive.org/stream/verhandlungende01goog#page/n246/mode/2up> .
- 1103.** Planck M 1900c Entropie und Temperatur strahlender Wärme Entropy and temperature of radiant heat *Annalen der Physik* **306** (4) pp 719 – 737
<http://adsabs.harvard.edu/abs/1900AnP...306..719P> ,
<https://dx.doi.org/10.1002%2Fandp.19003060410> .
- 1104.** Planck M 1900d Über irreversible Strahlungsvorgänge On irreversible radiation processes *Annalen der Physik* **306** (1) pp 69 – 122
<http://adsabs.harvard.edu/abs/1900AnP...306...69P> ,
<https://dx.doi.org/10.1002%2Fandp.19003060105> .
- 1105.** Planck M 1901 Über das Gesetz der Energieverteilung im Normalspektrum On the law of distribution of energy in the normal spectrum *Annalen der Physik* **309** (3) pp 553 – 563.
<http://adsabs.harvard.edu/abs/1901AnP...309..553P> ,
<https://dx.doi.org/10.1002%2Fandp.19013090310> ,
<http://theochem.kuchem.kyoto-u.ac.jp/Ando/planck1901.pdf> .
- 1106.** Planck M 1903 Treatise on thermodynamics *Longmans, Green & Co* London UK
<http://archive.org/stream/treatiseonthermo00planuoft#page/n7/mode/2up> ,
<http://openlibrary.org/books/OL7246691M> .
- 1107.** Planck M 1906 Vorlesungen über die Theorie der Wärmestrahlung *JA Barth* Leipzig Germany
<http://lcn.loc.gov/07004527> .
- 1108.** Planck M 1914 The theory of heat radiation 2nd edition *P Blakiston's Son & Co*
<http://openlibrary.org/books/OL7154661M> .
- 1109.** Planck M 1915 Eight lectures on theoretical physics *Dover Publications* ISBN 0-486-69730-4.
- 1110.** Planck M 1943 Zur Geschichte der Auffindung des physikalischen Wirkungsquantums *Naturwissenschaften* **31** (14–15) pp 153 – 159

- <http://adsabs.harvard.edu/abs/1943NW.....31..153P> ,
<https://dx.doi.org/10.1007%2F1475738> .
- 1111.** Einstein A 1905 Zur Elektrodynamik bewegter Körper On the electrodynamics of moving bodies *Annalen der Physik* Berlin Germany (in German) **322** (10) pp 891 – 921
<http://onlinelibrary.wiley.com/doi/10.1002/andp.19053221004/pdf> ,
<http://adsabs.harvard.edu/abs/1905AnP...322..891E>) ,
<http://dx.doi.org/10.1002%2Fandp.19053221004> .
- 1112.** Einstein A 1917 Zur Quantentheorie der Strahlung On the quantum mechanics of radiation *Physikalische Zeitschrift* (in German) **18** pp 121 – 128
<http://adsabs.harvard.edu/abs/1917PhyZ...18..121E> .
- 1113.** Einstein A 1924 Quantentheorie des einatomigen idealen gases Quantum theory of monatomic ideal gases *Sitzungsberichte der Preussischen Akademie der Wissenschaften Physikalisch-Mathematische Klasse* (in German) pp 261 – 267
<http://echo.mpiwg-berlin.mpg.de/MPIWG:DRQK5WYB> .
- 1114.** Einstein A, Podolsky B, Rosen N 1935 Can quantum-mechanical description of physical reality be considered complete? *Physical Review* American Physical Society **47** (10) pp 777 – 780
<http://journals.aps.org/pr/pdf/10.1103/PhysRev.47.777> ,
<http://adsabs.harvard.edu/abs/1935PhRv...47..777E> ,
<https://dx.doi.org/10.1103%2FPhysRev.47.777> .
- 1115.** Bohr N 1922 The structure of the atom Nobel prize lecture in Niels Bohr A centenary volume French A P, Kennedy P J (editors) *Harvard University Press* Cambridge Massachusetts pp 91 – 97 ISBN 978-0-674-62415-3.
- 1116.** Bohr N, Kramers H A, Slater J C 1924 The quantum theory of radiation *Philosophical Magazine* **6 76** (287) pp 785 – 802
http://www.cond-mat.physik.uni-mainz.de/~oettel/ws10/bks_PhilMag_47_785_1924.pdf,
<https://dx.doi.org/10.1080%2F14786442408565262> .
- 1117.** Bohr N, Rosenfeld L 1933 Kgl Danske Videnskab Selskab Mat Fyz Medd **12** no 8.
- 1118.** de Broglie L 1924, 1925 Recherches sur la théorie des quanta Researches on the quantum theory *Ph D Thesis* Sorbonne Paris France, *Annales de Physique* **10** (3) pp 22 – 128.
- 1119.** de Broglie L 1926 Ondes et mouvements Waves and motions *Gauthier-Villars* Paris France.
- 1120.** de Broglie L 1927 Rapport au 5e Conseil de Physique Solvay Brussels Belgium.

- 1121.** de Broglie L 1928 La mécanique ondulatoire Wave mechanics *Gauthier-Villars* Paris France.
- 1122.** Compton A 1926 X-Rays and electrons: An outline of recent X-Ray theory *D Van Nostrand Company Inc* New York USA
<https://www.worldcat.org/oclc/1871779> .
- 1123.** Compton A; Allison S K 1935 X-Rays in theory and experiment *D Van Nostrand Company Inc* New York USA
<https://www.worldcat.org/oclc/853654> .
- 1124.** Schrödinger E 1926 Quantisierung als Eigenwertproblem *Annalen der Phys* **384** (4) pp 273 – 376
<http://onlinelibrary.wiley.com/doi/10.1002/andp.19263840404/pdf> ,
<http://adsabs.harvard.edu/abs/1926AnP...384..361S> ,
<https://dx.doi.org/10.1002%2Fandp.19263840404> .
- 1125.** Schrödinger E 1935 Die gegenwärtige situation in der quantenmechanik (The present situation in quantum mechanics) *Naturwissenschaften* **23** (49) pp 823807 – 828812.
- 1126.** Fermi E 1934 Radioattività indotta da bombardamento di neutroni *La Ricerca scientifica* **1** (5) p 283 (in Italian)
<http://www.phys.uniroma1.it/DipWeb/museo/collezione%20Fermi/documento2.htm> .
- 1127.** Fermi E, Amaldi E, d'Agostino O, Rasetti F, Segre E 1934 Artificial radioactivity produced by neutron bombardment *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences* **146** (857) p 483
<http://adsabs.harvard.edu/abs/1934RSPSA.146..483F> ,
<https://dx.doi.org/10.1098%2Frspa.1934.0168> .
- 1128.** Townes Ch 1939 Concentration of the heavy isotope of carbon and measurement of its nuclear spin *PhD thesis* Caltech California USA
<http://thesis.library.caltech.edu/4202/> .
- 1129.** Townes Ch, Schawlow A 1955 Microwave spectroscopy *McGraw-Hill* USA ISBN 978-0-07-065095-4.
- 1130.** Gordon J, Zeiger H, Townes Ch 1955 The maser — new type of microwave amplifier, frequency standard, and spectrometer *Physical Review* **99** (4) p 1264
<http://adsabs.harvard.edu/abs/1955PhRv...99.1264G> ,
<https://dx.doi.org/10.1103%2FPhysRev.99.1264> .
- 1131.** von Neumann J 1955 Mathematical foundations of quantum mechanics *Princeton University Press* Princeton NJ USA.

- 1132.** Shimoda K, Wang T, Townes Ch 1956 Further aspects of the theory of the maser *Physical Review* **102** (5) p 1308
<http://adsabs.harvard.edu/abs/1956PhRv..102.1308S> ,
<https://dx.doi.org/10.1103%2FPhysRev.102.1308> .
- 1133.** Townes Ch H 1964 Nobel Prize in Physics Stockholm Sweden
http://nobelprize.org/nobel_prizes/physics/laureates/1964/townes-bio.html .
- 1134.** Townes Ch H 1966 Obtaining of coherent radiation with help of atoms and molecules *Uspekhi Fizicheskikh Nauk (UFN)* vol **88** no 3.
- 1135.** Townes Ch H 1969 Quantum electronics and technical progress *Uspekhi Fizicheskikh Nauk (UFN)* vol **98** no 5.
- 1136.** Townes Ch 1995 Making waves *American Institute of Physics Press* New York USA ISBN 978-1-56396-381-0.
- 1137.** Townes Ch 1999 How the laser happened: Adventures of a scientist *Oxford University Press* ISBN 978-0-19-512268-8.
- 1138.** Schiff L I 1949 Quantum mechanics *McGraw - Hill Book Company Inc* New York USA pp 1 – 404.
- 1139.** Blokhintsev D I 1954 Development of first nuclear reactor for nuclear power plant Moscow Russian Federation.
- 1140.** Blokhintsev D I 2004 Foundations of quantum mechanics 7th edition *Lan' Publishing House* St Petersburg Russian Federation ISBN 5-8114-0554-5 pp 1 – 664.
- 1141.** Prokhorov A M, Basov N G 1955 Molecular generator and amplifier *Uspekhi Fizicheskikh Nauk (UFN)* vol **57** no 3 pp 485 – 501.
- 1142.** Prokhorov A M, Fedorov V B 1963 *Soviet Journal of Experimental and Theoretical Physics JETP* **16** 1489.
- 1143.** Prokhorov A M 1964 Nobel Prize in Physics Stockholm Sweden
http://nobelprize.org/nobel_prizes/physics/laureates/1964/prokhorov-bio.html .
- 1144.** Prokhorov A M Quantum electronics 1965 *Uspekhi Fizicheskikh Nauk (UFN)* vol **85** no 4 pp 599 – 604.
- 1145.** Karlov N V, Prokhorov A M 1976 Laser's separation of isotopes *Uspekhi Fizicheskikh Nauk (UFN)* vol **118** no 4 pp 583 – 609.
- 1146.** Prokhorov A M 1979 To 25th anniversary of laser *Uspekhi Fizicheskikh Nauk (UFN)* vol **128** no 3.

- 1147.** Prokhorov A M (Editor in Chief), Buzzi J M, Sprangle P, Wille K 1992 Coherent radiation generation and particle acceleration *Research Trends in Physics Series American Institute of Physics Press* New York USA (Springer, Germany) ISBN 0-88318-926-7
<http://www.springer-sbm.de/index.php?id=121&L=0> .
- 1148.** Bardeen J 1956 Nobel Prize in Physics Stockholm Sweden
http://nobelprize.org/nobel_prizes/physics/laureates/1956/bardeen-bio.html .
- 1149.** Bardeen J 1972 Nobel Prize in Physics Stockholm Sweden
http://nobelprize.org/nobel_prizes/physics/laureates/1972/bardeen-bio.html .
- 1150.** Bardeen J 1990 Superconductivity and other macroscopic quantum phenomena *Physics Today* **43** (12) pp 25 – 31 doi: 10.1063/1.881218.
- 1151.** Schawlow A, Townes Ch 1958 Infrared and optical masers *Physical Review* **112** (6) p 1940
<http://dx.doi.org/10.1103%2FPhysRev.112.1940> ,
<http://adsabs.harvard.edu/abs/1958PhRv..112.1940S> .
- 1152.** Schawlow A 1963 Modern optical quantum generators *Uspekhi Fizicheskikh Nauk (UFN)* vol **81** no 12.
- 1153.** Schawlow A 1964 Nobel Prize in Physics Stockholm Sweden
http://nobelprize.org/nobel_prizes/physics/laureates/1964/schawlow-bio.html .
- 1154.** Gould R G 1959 The LASER, Light Amplification by Stimulated Emission of Radiation in Franken PA, Sands RH (editors) *The Ann Arbor Conference on Optical Pumping* The University of Michigan 15 June - 18 June 1959 p 128
<https://www.worldcat.org/oclc/02460155> .
- 1155.** Merzbacher E 1961 Quantum mechanics *John Willey and Sons Inc* New York USA pp 1 – 621.
- 1156.** Josephson B D 1962 Possible new effects in superconductive tunneling *Physical Letters* vol **1** p 251.
- 1157.** Josephson B D 1964 Coupled superconductors *Review Modern Physics* vol **36** p 216.
- 1158.** Josephson B D 1965 Super currents through barriers *Advances in Physics* vol **14** p 419.
- 1159.** Basov N G 1964 Nobel Prize in Physics Stockholm Sweden
http://nobelprize.org/nobel_prizes/physics/laureates/1964/basov-bio.html .
- 1160.** Basov N G 1965 Semiconductor quantum generators *Uspekhi Fizicheskikh Nauk (UFN)* vol **85** no 4.
- 1161.** Heisenberg W 1967 Quantum theory and its interpretation in Niels Bohr Rozental S (editor) *North Holland John Wiley and Sons Inc* New York USA.

- 1162.** Petersen A 1968 Quantum physics and philosophical tradition *MIT Press* Cambridge USA.
- 1163.** DeWitt B S 1970 Quantum mechanics and reality *Physics Today* **23** (9) p 30
<http://dx.doi.org/10.1063/1.3022331> .
- 1164.** Landau L D, Lifshits E M 1977 Quantum mechanics 3rd edition *Pergamon Press* Oxford UK.
- 1165.** Tesche C D, Clarke J 1977 DC SQUID: Noise and optimization *Journal of Low Temperature Physics* **29** pp 301 – 331.
- 1166.** Clarke J 1989 Principles and applications of SQUIDS *Proc IEEE* **77** pp 1208 – 1223.
- 1167.** Fulton T A, Dolan G J 1987 Observation of single-electron charging effects in small tunnel junctions *Phys Review Letters* **59** pp 109 – 112.
- 1168.** Galindo A, Pascual P 1990, 1991 Quantum mechanics vols **1, 2** *Springer-Verlag* Berlin Germany pp 1 – 417, 1 – 415.
- 1169.** Grabert H, Devoret M H (editors) 1992 Single charge tunneling: Coulomb blockade phenomena in nanostructures *Plenum Press* New York USA.
- 1170.** Yokoyama H, Ujihara K 1995 Spontaneous emission and laser oscillation in micro-cavities *CRC Press* Boca Raton USA ISBN 0-8493-3786-0.
- 1171.** Alferov Zh I 1996 The history and future of semiconductor heterostructures *in* Proceedings 99th Nobel Symposium Arild June 4-8 1996 *Physica Scripta* **T68** 32.
- 1172.** Mygind J 1997 Private communications on the new sources of noise in the single electron transistors *Department of Physics* Technical University of Denmark Lyngby Denmark.
- 1173.** Milonni P W, Eberly J H 1998 Lasers *John Wiley and Sons Inc* USA ISBN 0-471-62731-3.
- 1174.** Muck M 1998 Radio frequency superconducting quantum interference devices *Institute of Applied Physics* University of Giessen Germany.
- 1175.** Bimberg D, Grundmann M, Ledentsov N N 1999 Quantum dot heterostructures *John Wiley and Sons Inc* New York USA.
- 1176.** Loudon R 2001 The quantum theory of light 3rd edition *Oxford University Press* New York USA.
- 1177.** Papirov I I 2013 Quantum physics and quantum consciousness *LAP Lambert Academic Publishing* Mannheim Germany ISBN 10: 3659403547? ISBN 13: 9783659403545.
- 1178.** Ledenyov V O, Ledenyov O P, Ledenyov D O 2002 A quantum random number generator on magnetic flux qubits *Proceedings of the 2nd Institute of Electrical and*

Electronics Engineers Conference IEEE-NANO 2002 Chicago Washington DC USA IEEE
Catalog no 02TH86302002 Library of Congress number: 2002106799 ISBN: 0-7803-7538-6.

Wave Function in Schrödinger Quantum Mechanical Wave Equation in Quantum Mechanics:

- 1179.** de Broglie L 1924, 1925 Recherches sur la théorie des quanta Researches on the quantum theory *Ph D Thesis* Sorbonne Paris France, *Annales de Physique* **10** (3) pp 22 – 128.
- 1180.** Schrödinger E 1926a Quantisierung als Eigenwertproblem *Annalen der Phys* **384** (4) pp 273 – 376 doi:10.1002/andp.19263840404 Bibcode:1926AnP...384..361S
<https://dx.doi.org/10.1002%2Fandp.19263840404> ,
<http://adsabs.harvard.edu/abs/1926AnP...384..361S> .
- 1181.** Schrödinger E 1926b An undulatory theory of the mechanics of atoms and molecules *Physical Review* **28** (6) pp 1049 – 1070 doi:10.1103/PhysRev.28.1049
Bibcode:1926PhRv...28.1049S
<https://dx.doi.org/10.1103%2FPhysRev.28.1049> ,
<http://adsabs.harvard.edu/abs/1926PhRv...28.1049S> .
- 1182.** Schrödinger E 1935 Die gegenwärtige situation in der quantenmechanik (The present situation in quantum mechanics) *Naturwissenschaften* **23** (49) pp 823807 – 828812.
- 1183.** Schrödinger E 1982 Collected papers on wave mechanics 3rd edition *American Mathematical Society* ISBN 978-0-8218-3524-1.
- 1184.** Schrödinger E 1984 Collected papers *Friedrich Vieweg und Sohn* ISBN 3-7001-0573-8.
- 1185.** Einstein A 1917 Zur Quantentheorie der Strahlung On the quantum mechanics of radiation *Physikalische Zeitschrift* (in German) 18 pp 121 – 128
<http://adsabs.harvard.edu/abs/1917PhyZ...18..121E> .
- 1186.** Einstein A, Podolsky B, Rosen N 1935 Can quantum-mechanical description of physical reality be considered complete? *Physical Review* American Physical Society **47** (10) pp 777 – 780
<http://journals.aps.org/pr/pdf/10.1103/PhysRev.47.777> ,
<http://adsabs.harvard.edu/abs/1935PhRv...47..777E> ,
<https://dx.doi.org/10.1103%2FPhysRev.47.777> .
- 1187.** Akhiezer A I, Berestetsky V B 1953 Quantum electrodynamics *Gostekhtheorizdat* Moscow Russian Federation pp 1 – 428.
- 1188.** Akhiezer A I, Berestetsky V B 1964 Quantum electrodynamics 3rd edition *Nauka* Moscow Russian Federation pp 1 – 624.

- 1189.** Akhiezer A I, Berestetsky V B 1980 Quantum electrodynamics 4th edition *Nauka* Moscow Russian Federation pp 1 – 432.
- 1190.** Berestetsky V B, Lifshits E M, Pitaevsky L P 1980 Quantum electrodynamics *Nauka* Moscow Russian Federation pp 1 – 704.
- 1191.** Dirac P A M 1958 The principles of quantum mechanics 4th edition *Oxford University Press* UK.
- 1192.** Merzbacher E 1961 Quantum mechanics *John Willey and Sons Inc* New York USA pp 1 – 621.
- 1193.** Feynman R, Leighton R B, Sands M 1965 Feynman lectures on physics vol **3** *Addison-Wesley* USA ISBN 0-201-02118-8.
- 1194.** Atkins P W 1974 Quanta: A handbook of concepts *Oxford University Press* UK ISBN 0-19-855493-1.
- 1195.** Atkins P W 1977 Molecular quantum mechanics parts I and II: An introduction to quantum chemistry vol **1** *Oxford University Press* UK ISBN 0-19-855129-0.
- 1196.** Atkins P W 1978 Physical chemistry *Oxford University Press* UK ISBN 0-19-855148-7.
- 1197.** Landau L D, Lifshits E M 1977 Quantum mechanics 3rd edition *Pergamon Press* Oxford UK.
- 1198.** Bransden B H, Joachain C J 1983 Physics of atoms and molecules *Longman* ISBN 0-582-44401-2.
- 1199.** Resnick R, Eisberg R 1985 Quantum physics of atoms, molecules, solids, nuclei and particles 2nd edition *John Wiley & Sons Inc* USA ISBN 978-0-471-87373-0.
- 1200.** Galindo A, Pascual P 1990, 1991 Quantum mechanics vols **1, 2** *Springer-Verlag* Berlin Germany pp 1 – 417, 1 – 415.
- 1201.** Shankar R 1994 Principles of quantum mechanics 2nd edition *Kluwer Academic/Plenum Publishers* ISBN 978-0-306-44790-7.
- 1202.** Ballentine L 1998 Quantum mechanics: A modern development *World Scientific Publishing Co* Singapore ISBN 9810241054.
- 1203.** Bransden B H, Joachain C J 2000 Quantum mechanics 2nd edition *Prentice Hall PTR* ISBN 0-582-35691-1.
- 1204.** Liboff R 2002 Introductory quantum mechanics 4th edition *Addison Wesley* ISBN 0-8053-8714-5.
- 1205.** Abers E, Pearson Ed 2004 Quantum mechanics *Addison Wesley Prentice Hall Inc* ISBN 978-0-13-146100-0.

- 1206.** Blokhintsev D I 2004 Foundations of quantum mechanics 7th edition Lan' Publishing House St Petersburg Russian Federation ISBN 5-8114-0554-5 pp 1 – 664.
- 1207.** Griffiths D J 2004 Introduction to quantum mechanics 2nd edition Prentice Hall NJ USA ISBN 0-13-111892-7.
- 1208.** Vakarchuk I O 2004 Quantum mechanics L'viv National University Publishing House L'viv Ukraine.
- 1209.** McMahon D 2006 Quantum mechanics demystified McGraw Hill USA ISBN (10) 0 07 145546 9.
- 1210.** Halliday D 2007 Fundamentals of physics 8th edition John Wiley & Sons Inc NY USA ISBN 0-471-15950-6.
- 1211.** Hand L N, Finch J D 2008 Analytical mechanics Cambridge University Press UK ISBN 978-0-521-57572-0.
- 1212.** Teschl G 2009 Mathematical methods in quantum mechanics with applications to Schrödinger operators American Mathematical Society Providence USA ISBN 978-0-8218-4660-5.
- 1213.** Zettili N 2009 Quantum mechanics: Concepts and applications John Wiley & Sons Inc NY USA ISBN 978-0-470-02678-6.
- 1214.** Laloe F 2012 Do we really understand quantum mechanics Cambridge University Press UK ISBN 978-1-107-02501-1.
- 1215.** Rylov Y A 2015 What is the wave function and why is it used in quantum mechanics? pp 1 – 18
<http://gasdyn-ipm.ipmnet.ru/~rylov/yrylov.htm> .
- 1216.** Wikipedia 2015i Erwin Schrödinger Wikipedia USA
www.wikipedia.org .
- 1217.** Wikipedia 2015j Schrödinger equation Wikipedia USA
www.wikipedia.org .
- Artificial Intelligence Science, Computer Science:**
- 1218.** Turing A October 1950 Computing machinery and intelligence *Mind* **LIX** 236 pp 433 – 460 doi:10.1093/mind/LIX.236.433 ISSN 0026-4423.
- 1219.** Rich E 1983 Artificial intelligence McGraw-Hill USA ISBN 0-07-052261-8.
- 1220.** Winston P H 1984 Artificial intelligence Addison-Wesley Reading Massachusetts USA ISBN 0-201-08259-4.
- 1221.** Haugeland J 1985 Artificial intelligence: The very idea MIT Press Cambridge MA USA ISBN 0-262-08153-9.

- 1222.** Edelson E 1991 The nervous system *Chelsea House* New York USA ISBN 978-0-7910-0464-7.
- 1223.** Jang J-S R July 1991 Fuzzy modeling using generalized neural networks and Kalman filter algorithm *Proceedings of the 9th National Conference on Artificial Intelligence AAAI-91* pp 762 – 767.
- 1224.** Sun R, Bookman L (editors) 1994 Computational architectures: Integrating neural and symbolic processes *Kluwer Academic Publishers* Needham MA USA.
- 1225.** John G H, Langley P 1995 Estimating continuous distributions in Bayesian classifiers *The 11th Conference on Uncertainty in Artificial Intelligence*.
- 1226.** Dowe D L, Hajek A R 1997 A computational extension to the Turing test *Proceedings of the 4th Conference of the Australasian Cognitive Science Society*.
- 1227.** Kohavi G J R 1997 Wrappers for feature subset selection *Artificial Intelligence* vol **97** no 1-2 pp 272 – 324.
- 1228.** Mitchell T 1997 Machine learning *McGraw Hill* USA.
- 1229.** Nilsson N 1998 Artificial intelligence: A new synthesis *Morgan Kaufmann Publishers* ISBN 978-1-55860-467-4.
- 1230.** Nilsson N 2010 The quest for artificial intelligence: A history of ideas and achievements *Cambridge University Press* New York USA ISBN 978-0-521-12293-1.
- 1231.** Poole D, Mackworth A, Goebel R 1998 Computational intelligence: A logical approach *Oxford University Press* New York USA ISBN 0-19-510270-3.
- 1232.** Calmet J, Benhamou B, Caprotti O, Henocque L, Sorge V (editors) 2002 Artificial intelligence, automated reasoning, and symbolic computation *Springer-Verlag* Berlin Germany.
- 1233.** Russell S J, Norvig P 2003 Artificial intelligence: A modern approach 2nd edition *Prentice Hall* Upper Saddle River New Jersey USA ISBN 0-13-790395-2.
- 1234.** Luger G, Stubblefield W 2004 Artificial intelligence: Structures and strategies for complex problem solving 5th edition *The Benjamin Cummings Publishing Company Inc* ISBN 0-8053-4780-1.
- 1235.** Bach J 2008 Seven principles of synthetic intelligence in Artificial general intelligence 2008 Proceedings of the First AGI Conference Wang P, Goertzel B, Franklin S (editors) *IOS Press* pp 63 – 74 ISBN 978-1-58603-833-5.
- 1236.** Neapolitan R, Jiang X 2012 Contemporary artificial intelligence *Chapman & Hall* CRC ISBN 978-1-4398-4469-4.

Continuous Time Signal, Analog Signals, Discrete Time Signal, Digital Signals, Spectrum of Signals, Electromagnetic Field, Gravitation Field, Calibrating Field, Information Field Theories in Physics and Engineering Sciences:

- 1237.** Maxwell J C 1890 Introductory lecture on experimental physics in Scientific papers of J C Maxwell Niven W D (editor) vols **1, 2** Cambridge UK.
- 1238.** Walsh J L 1923a A closed set of normal orthogonal functions *American J Math* **45** pp 5 – 24.
- 1239.** Walsh J L 1923b A property of Haar's system of orthogonal functions *Math Ann* **90** p 3845.
- 1240.** Wikipedia 2015d Joseph L Walsh *Wikipedia* USA
www.wikipedia.org .
- 1241.** Gabor D 1946 Theory of communication Part 1 The analysis of information *J Inst Elect Eng* **93** pp 429 – 441.
- 1242.** Shannon C E 1948 A mathematical theory of communication *Bell System Technical Journal* vol **27** pp 379 – 423, 623 – 656
<http://cm.bell-labs.com/cm/ms/what/shannonday/paper.html> .
- 1243.** Bose R C, Shrikhande S S 1959 A note on a result in the theory of code construction *Information and Control* **2** (2) pp 183 – 194 doi:10.1016/S0019-9958(59)90376-6
CiteSeerX: 10.1.1.154.2879
<http://dx.doi.org/10.1016%2FS0019-9958%2859%2990376-6>
<http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.154.2879> .
- 1244.** Granger C W J, Hatanaka M 1964 Spectral analysis of economic time series *Princeton University Press* Princeton USA.
- 1245.** Yuen C-K 1972 Remarks on the ordering of Walsh functions *IEEE Transactions on Computers* **21** (12) p 1452 doi:10.1109/T-C.1972.223524
<http://dx.doi.org/10.1109%2FT-C.1972.223524> .
- 1246.** Hwang K, Briggs F A 1984 Computer architecture and parallel processing *McGraw-Hill* New York USA.
- 1247.** Orfanidis S J 1985 Optimum signal processing: An introduction 2nd edition *Macmillan* New York USA.
- 1248.** Orfanidis S J 1995 Introduction to signal processing *Prentice-Hall* Englewood Cliffs NJ USA.
- 1249.** Anceau F 1986 The architectures of microprocessors *Addison-Wesley* Wokingham England.

- 1250.** Fountain T 1987 Processor arrays, architecture and applications *Academic Press* London UK.
- 1251.** Chen C H (editor) 1988 Signal processing handbook *Marcel Dekker* New York USA.
- 1252.** Kay S M 1988 Modern spectral estimation: Theory and application *Prentice-Hall* Englewood Cliffs NJ USA.
- 1253.** Oppenheim A V, Schafer R W 1989 Discrete-time signal processing *Prentice-Hall* Englewood Cliffs NJ USA.
- 1254.** Van de Goor A J 1989 Computer architecture and design *Addison-Wesley* Wokingham England.
- 1255.** Priemer R 1991 Introductory signal processing *World Scientific* Singapore ISBN 9971509199.
- 1256.** Jeruchim M C, Balaban Ph, Shanmugan K S 1992 Simulation of communication systems *Plenum Press* New York USA.
- 1257.** Witte R A 1993, 2001 Spectrum and network measurements 1st edition *Prentice Hall Inc* Upper Saddle River NJ USA, 2nd edition *Noble Pub Corp* Atlanta GA USA ISBN 10 1884932169 LC TK7879.4.W58 2001 pp 1 – 297.
- 1258.** Hsu P H 1995 Schaum's theory and problems: Signals and systems *McGraw-Hill* ISBN 0-07-030641-9.
- 1259.** Simon M K, Hinedi S M, Lindsey W C 1995 Digital communication techniques – Signal design and detection *Prentice-Hall* Englewood Cliffs NJ USA.
- 1260.** Simon M K, Alouini M S 2000 Digital communication over fading channels – A unified approach to performance analysis 1st edition *John Wiley and Sons Inc* USA.
- 1261.** Proakis J G, Manolakis D G 1996 Digital signal processing 3rd edition *Prentice Hall* Upper Saddle River NJ USA.
- 1262.** Lathi B P 1998 Signal processing and linear systems *Berkeley-Cambridge Press* ISBN 0-941413-35-7.
- 1263.** Prisch P 1998 Architectures for digital signal processing *John Wiley and Sons Inc* Chichester UK.
- 1264.** Gershenfeld N A 1999 The nature of mathematical modeling *Cambridge University Press* UK ISBN 0-521-57095-6.
- 1265.** Parhami B 1999 Computer arithmetic: Algorithms and hardware design *Oxford University Press* Oxford UK.
- 1266.** Wanhammar L 1999 DSP integrated circuits *Academic Press* San Diego California USA ISBN 0-12-734530-2 pp 1 – 561.

- 1267.** Koren I 2001 Computer arithmetic algorithms *A K Peters Ltd* Natick MA USA.
- 1268.** Sklar B 2001 Digital communications 2nd edition *Prentice-Hall* Englewood Cliffs NJ USA.
- 1269.** McMahon D 2007 Signals and systems demystified *McGraw Hill* New York USA ISBN 978-0-07-147578-5.
- 1270.** Rice M 2008 Digital communications - A discrete-time approach *Prentice Hall* Englewood Cliffs NJ USA.
- 1271.** Wikipedia 2015e Signal (electrical engineering) *Wikipedia Inc* USA
www.wikipedia.org .
- 1272.** Wikipedia 2015f Continuous wave *Wikipedia Inc* USA
www.wikipedia.org .
- 1273.** Wikipedia 2015g Discrete-time signal *Wikipedia Inc* USA
www.wikipedia.org .
- 1274.** Wikipedia 2015h Hadamard code *Wikipedia* USA
www.wikipedia.org .
- 1275.** Ledenyov D O, Ledenyov V O 2015a Nonlinearities in microwave superconductivity 8th edition *Cornell University* NY USA pp 1 – 923
www.arxiv.org/1206.4426v8.pdf .