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MARKETS AND PRODUCTION PRICING: USING THE SUSTAINABILITY MARKET PRICE TO POINT OUT AND LINK THE PRODUCTION PRICE STRUCTURE OF PARTNERSHIP BASED PARADIGMS AND DEEP WORLD VIEW BASED PARADIGMS

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ABSTRACT

The heart of any market is its production price structure, which depending on the model type it can operate at a profit or at not for profit. All those models which operate at a profit could also be conceived in ways where they are producing at zero profits. Some of the models that are not for profits can also be viewed as operating below zero profits or at an economic loss. All these different production price structures are the result of different set of assumption made sometimes in confrontational paradigm mode(e.g. red socialism vrs bare capitalism) without any attempt to link them to higher level markets or models so as to have a better understanding of a) how they work or should be expected to work; and b) what type of paradigm evolution paths they should be expected to follow in the face of paradigm shift pressures. Yet it turns out to be that all these different, and apparently isolated production price structures had a common origin had thinkers like Adam Smith and Karl Marx looked at markets from the sustainability market point of view during their life time. Among the goals of this paper is to show how the sustainability market price can be used to extract well-known production price structures such as the red socialist model and the traditional market model as well as not so well-known ones and link them given specific assumptions.

Key Words: Markets, production prices, sustainability market price, green market price, red market price, socio-environmental model price, red socialist price, traditional market price, environmental model, social margin, environmental margin, economic margin, profits

Introduction

a) Market models

Markets can be seen in general as the mechanism that brings together producers/ Industries/economies and consumers/people/society. The market mechanism changes if we look at it from the dominance point of view, the choice structure point of view, and the profit point of view.

i) Markets and dominance

From the dominance point of view markets can be classified as 1) Full dominance or deep thinking based markets such as the red socialist market(e.g. only society matters), the traditional market model(e.g. only the economy matters), and the environmental market(e.g. only the environment matters); 2) Partial dominance or Partial partnership based models such as the red market(e.g. society and economy matter), green market(e.g. environment and economy matter), and the socio-environmental market(e.g. society and environment matter; and 3) No dominance or the full partnership based market(e.g. society, economy and environment matter) such as the sustainability market.

ii) Markets and choice structure

From the choice structure point of view markets can be grouped as 1) Independent choice based markets(e.g. full dominance based markets); 2) Partial codependent choice based markets(e.g. partial partnership based models); and 3) Fully codependent choice base markets(e.g. full partnership based markets).

iii) Markets and profits

From the profits point of view markets can be divided as 1) For profits, when they aim at achieving their goal at a profit(e.g. the traditional market, red markets, green markets, sustainability markets); 2) Not for profits, when they aim to achieve only their specific goal(e.g. the red socialist market, the environmental market).. Not for profit markets can be also divided into two types: 1) the zero profit markets, when the aim is only to recover all the cost of production, economic and non-economic(e.g. any of the for profits markets can be operated at a zero profit market); and 2) Below zero profit markets, those producing at an economic loss as they only recover specific non-economic cost of production(e.g. the red socialist market and the environmental market).

iv) Markets and paradigm shifts

When there are paradigm shift from one market to another then the model structure, the choice structure, and the goal structure shift at the same time leaving the knowledge based of the original paradigm behind as it no longer works in the new paradigm. New paradigms require new ideas or fixed old ideas(Muñoz 2016a) as now they have a different model structure, different choice structure, and different goal.

It is known that the old cold war was a clash between a for a deep profit market(Adam Smith's traditional market) and a deep not for profit market(Karl Marx's red socialism)(Muñoz 2016b); and that Karl Marx's world lost the clash due to the ongoing accumulation of capitalism deficits(Muñoz 2010) leading to a paradigm shift from red socialism to red markets. Today former red socialist countries like China and Russia are main big players in capitalist markets(VOA 2016); and old former capitalist countries have now embraced the idea of green

markets to address environmental issues like climate change(UN 2016). In other words, today some part of the world live under red capitalism and others under green capitalism.

b) Production price structures

Production prices are at the heart of markets; and therefore each of the market models described above has a price structure that allows them to meet their goal, be it for profits or not.

1) For profit price structure(FP)

If the aim of the market model is to meet the goal at a profit, then the production price reflects all production costs plus profits. If we make C_1, C_2, …..C_n all the different costs of production and we make "i " to be the desired profit, then the for profit production price can be stated as follows:

$$\mathbf{FP = C_1 + C_2 + \ldots.. + C_n + i = \sum_{C=1}^{n} C_n + i}$$

Hence, the for profit production price(FP) is equal to full cost of production plus profits.

For example if there are 3 types of production costs, C_1 = Economic margin, C_2 = social margin, and C_3 = environmental margin and i = desired profit, then the for profit production price would be:

$$FP = C_1 + C_2 + C_3 + i = \sum_{C=1}^{3} C_n + i$$

Therefore, the for profit production price(FP) is equal to full cost of production, social, economic, and environmental costs, plus profits.

2) The not for profit production price(NFP)

If the aim of the market model is to meet only the goal, then the production price reflects all production costs relevant to that goal. If we make C_1, C_2, …..C_n all the different costs of production relevant to that goal, then the not for profit production price can be stated as follows:

$$\mathbf{NFP = C_1 + C_2 + \ldots.. + C_n = \sum_{C=1}^{n} C_n}$$

Hence, the not for profit production price(NFP) is equal to full cost of production.

For example if there are 3 types of production costs, C_1 = Economic margin, C_2 = social margin, and C_3 = environmental margin, then the not for profit production price would be:

$$NFP = C_1 + C_2 + C_3 = \sum_{C=1}^{3} C_n$$

Therefore, the not for profit production price(NFP) is equal to full cost of production, social, economic, and environmental costs.

2.1) The zero profit production price

If the aim of the market is to meet the goal in a financially responsible manner or ideology, then the production price must be set at zero profits, reflecting all cost of production, economic and non-economic costs of production: For example if there are 3 types of production costs, C_1 = Economic margin, C_2 = social margin, and C_3 = environmental margin, then the zero profit price(ZPP) will be:

$$ZPP = C_1 + C_2 + C_3 = \sum_{C=1}^{3} C_n \quad \text{as } C_1 > 0$$

Therefore, the zero profit production price(ZPP) is equal to full cost of production, social, economic, and environmental costs or it is equal to all economic and non-economic cost of productions. Notice that in these zero profit markets economic margins cannot be zero($C_1 > 0$) as they operate in financially responsible ways.

2.2) Below zero profit production price(BZPP)

If the aim of the market is to meet the goal in a financially irresponsible manner or ideology, then the production price must be set at below zero profits, reflecting only the non-economic cost of production For example if there are 3 types of production costs, C_1 = Economic margin, C_2 = social margin, and C_3 = environmental margin, but the economic margin is left out($C_1 = 0$), then the below zero profit price(BZPP) will be:

$$BZPP = C_1 + C_2 + C_3 = 0 + C_2 + C_3 = C_2 + C_3 = \sum_{C=2}^{3} C_n \quad \text{as } C_1 = 0$$

Therefore, the below zero profit production price(BZPP) is equal to full non-economic costs of production, social and environmental costs or it is equal to only all non-economic cost of productions. Notice that in these below zero profit markets economic margins are not accounted for or do not exists(C1 = 0) as they operate in a financially irresponsible way accumulating in the process capitalism deficits.

It is known that the capitalist system is motivated by profit making and communism is not as communism produces at social cost only(IGC 1999; Pp. 29-30), which is in essence what fueled the old cold war for so long,(the fight profits vrs no profits), but now that the cold war is over since 1991 former red socialist countries like China are pricing in ways similar to old capitalist countries; and China has started to move away from social self-sufficiency principles(USDA 2015). Since communism produced at an economic loss it generated a lot of waste which the Czech President Vaclav Havel called monstrous and stinky; and which Soviet President Mikhail Gorbachev called resource squandering(Shleifer and Treisman 2014; P.3).

e) Linking production pricing mechanisms

All the productions prices of all of the markets described above can be organized in a way of increasing stability or from the bottom up in three levels like in a pyramid structure: level 1 or level of full dominance(e.g. deep paradigm based models); level 2 or level of partial dominance(e.g. partial partnership paradigm based models); and level 3 level of no dominance(e.g. full partnership based model). Then the production price structure of the top level market in the pyramid, the sustainability market, if known can be used to extract lower level production price structures and to link them with higher level production price structures.

Muñoz(2012) showed that when we fully correct the traditional market model(TM) to reflect social and environmental concerns at the same time by adding a social margin(SM) and a green or environmental margin(GM) to the traditional market price(P) we arrive to the right market price(RMP), which is the current sustainability price(CSP) having the form:

RMP = CSP = SP = P + SM + GM

Hence, notice that the sustainability price(SP) is equal to the traditional market price(P) plus the social margin(SM) plus the green margin(GM) as it has the structure of a fully corrected traditional market price or a socially and environmentally friendly traditional market price. Muñoz(2016c) pointed out that the structure of the perfect sustainability market(S = ABC) is similar to the one above as it reflects the structure of a fully corrected traditional market price or a fully corrected green market price, the same price structure it should have had if Adam Smith would have proposed the sustainability market in his time(Muñoz 2015). Notice that "P" in the traditional market(TM) is a for profit price so P = ECM + i , but if we were to assume zero profit sustainability market price, then P = ECM, where ECM = Economic margin and i = profits.

Since the Bruntland Commission critique of traditional market thinking in 1987(WCED 1987) and the paradigm shift to green markets in 2012(UNCSD 2012a: 2012b) interest in green market ideas is increasing(UNDESA 2012; WB 2012: UNEP 2013: UN 2015a: UN 2015b: UN

2016: UNIDO 2016) as well as the use of sustainability ideas or vision(IUCN 2006: OECD 2008: Houghton 2011: DT 2016).

Consistent with the discussion above, production prices can be linked to higher level production price structures, but not much has been written about this and this paper attempts to change that a) by showing how the sustainability production price structure shared above can be used to extract and link all lower level production price structures and b) by highlighting how this framework can be used to understand paradigm death and shift dynamics and the past, present, and future evolution of development thoughts.

Objectives

a) To show how the production price structure of all models placed below the sustainability model can be extracted from the sustainability market price structure and linked given specific assumptions; b) To highlight how all these extracted production price structures can be organized and linked to paradigm evolution paths and to different levels of stability; c) To stress that reversing the flow of the arrows in the framework above give us a clear map of the specific correction or cost internalization actions that needs to be made at lower level paradigms to shift them to higher level paradigms; and that the highest level that can be reached is the sustainability market paradigm; d) To indicate how the paradigm evolution framework above can be redesigned to show the structure of the old cold war, of the 1991 shift to red markets, of the 2012 shift to green markets and of the future cold war; and e) To highlight the expected full paradigm shift path towards sustainability for the red market, the green market, and the socio-environmental model.

Methodology

First, the terminology used in this paper is listed. Second, some operational concepts are provided. Third, it is shown in detail how lower level production price structures can be derived from the sustainability market price. Fourth, a figure is provided organizing all the production price structures vertically in three branches, social, economic, and environmental; and horizontally in three levels of stability, level 1/deep thinking models, level 2/partnership based models, and level 3/sustainability market models. Fifth, the same figure above is shared by with reverse arrows to show the direction of paradigm shifts in each branch as well as the specific corrections or cost internalization needed to shift paradigms from lower levels to higher levels of stability.

Sixth, the paradigm evolution framework above is redesigned to highlight the structure of the old cold war in level 1/the battle for single dominance, the structure of the 1991 paradigm shift to red markets in previously socialist countries, the structure of the 2012 paradigm shift to green markets in old capitalist countries, and the structure of the future cold war taking place at level 2/the battle for partnership dominance. Seventh, it is shown that the full paradigm shift path of red markets, green markets and socio-environmental models leads them straight towards sustainability. And finally some food for thoughts and conclusions are given.

Terminology

A = Dominant/active society a = Dominated/passive society

B = Dominant/active economy b = Dominated/passive economy

C = Dominant/active environment c = Dominated/passive environment

P = Traditional market price RSP = Red market price

SSG = Social sustainability gap SM = Social margin

ECM = Economic margin TM = Traditional market

GM = Green market RM = Red market

S = Sustainability market EM = Environmental or green margin

SP = Sustainability market price ENM = Environmental model

SENM = Socio-environmental model GP = Green market price

SENP = Socio-environmental Price RP = Red market price

SENCM = Socio-environmental cost margin i = Profits

GMCM = Green market cost margin TMP = Traditional market price

RMCM = Red market cost margin GM = Green market

SMCM = Sustainability market cost margin RM = Red market

RSM = Red socialist model SSG = Social sustainability gap

Operational concepts

i) Traditional market, the economy only market

ii) Green market, the environmentally friendly market

iii) Red market, the socially friendly market

iv) Sustainability market, the socially and environmentally friendly market

v) Environmental or green margin, to cover the extra cost of making the business environmentally friendly or to cover only the environmental cost of environmentally friendly production or to cover the environmental cost of red market production

vi) Social margin, to cover the extra cost of making the business socially friendly or to cover only the social cost of socially friendly production or to cover the cost of making green markets socially friendly or to cover the cost of making environment only models socially friendly.

vii) Economic margin, to cover only the economic cost of production

viii) Economic profit(i), the incentive to encourage economic activity

ix) Traditional market price, general market for profit price(TMP = ECM + i = P)

x) Green market price, the for profit price that reflects both the economic and the environmental cost of production or the price that covers the cost of environmentally friendly production at a profit(GP = ECM + i + EM = P + EM)

xi) Red market price, the for profit price that reflects both the economic and the social cost of production or price that covers the cost of socially friendly production at a profit(RP = ECM + i + SM = P + SM)

xii) Sustainability market price, the for profit price that reflects the economic, social, and the environmental cost of production or the price that covers the cost of socially and environmentally friendly production at a profit(SP = ECM + i + SM + EM = P + SM + EM)

xiii) Green market knowledge gap, the knowledge gap created by the paradigm shift from traditional markets to green markets or when correcting Adam Smith's model to reflect environmental concerns..

xiv) Red market knowledge gap, the knowledge gap created by the paradigm shift from red socialism to red markets or the knowledge gap created by correcting Adam Smith's traditional market to reflect social concerns

xv) Sustainability market knowledge gap, the knowledge gap created when any paradigm shifts towards sustainability, at once or step by step.

xvi) Micro-economics, the theory of the traditional firm and consumer.

xvii) Macro-economics, the theory of the traditional economy.

xviii) Green micro-economics, the theory of the environmentally responsible firm and consumer.

xix) Green macroeconomics, the theory of the environmentally responsible economy.

xx) Red micro-economics, the theory of the socially responsible firm and consumer

xxi) Red macro-economics, the theory of the socially responsible economy.

xxii) Sustainability market based micro-economics, the theory of the socially and environmentally responsible firm and consumer.

xxiii) Sustainability based macro-economics, the theory of the socially and environmentally responsible economy

xxiv) Trickledown effect, the expectation that traditional markets and growth will sooner or later benefit the poor

xxv) Green trickledown effect, the expectation that green markets and green growth will sooner or later benefit the poor.

xxvi) Red trickledown effect, the expectation that red markets and red growth will sooner or later benefit the environment

xxvii) Deep paradigm, a fully exclusive model(e.g. the traditional market).

xxviii) Partial partnership paradigm, a partially inclusive model(e.g. the green market, the red market).

xxix) Full partnership paradigms, a fully inclusive model(e.g. the sustainability market).

xxx) Externalities, factors assumed exogenous to a model

xxxi) Full externality assumption, only one factor is the endogenous factor in the model, the others are exogenous factors.

xxxii) Partial externality assumption, not all factors are endogenous factors at the same time in the model.

xxxiii) No externality assumption, all factors are endogenous factors at the same time in the model.

xxxiv) Sustainability market cost margin(SMCM), the sum of all cost margins in the sustainability market \price

xxxv) Red market cost margin(RMCM), the sum of all margins in the red market price

xxxvi) Green market cost margin(GMCM), the sum of all margins in the green market price

xxxvii) Socio-environmental model cost margin(SENCM), the sum of all margins in the socio-environmental model price

The sustainability market price(SP)

Sustainability markets(S = ABC) are fully inclusive for profit markets and they can be seen at having the price structure of a fully corrected for profit traditional market price(P) after making it socially and environmentally friendly at the same time as shown below:

i) The sustainability production price model(SP) as a full correction of Adam Smith's model can be stated as follows:

Since the price structure of the traditional market is TMP = P, then the full correction to make it socially and environmentally friendly at the same time takes the following form:

1) SP = P + SM + EM

The formula 1) above says that the sustainability price(SP) is the for profit traditional market price(P) plus the social margin(SM) and the environmental margin(EM) needed to be internalized to make it socially and environmentally friendly at the same time.

ii) The sustainability price (SP) in terms of economic margin(ECM) and profits(i)

Since the for profit price(P) is equal to the economic margin(ECM) plus profits(i), P = ECM + i and then when we substitute this in formula 1) above we get

2) SP = ECM + i + SM + EM

Formula 2) above says that the sustainability price(SP) is the price that covers the economic cost(ECM), the social costs(SM) and the environmental cost(EM) of production at a profit(i).

Since the sustainability market cost margin(SMCM) is the sum of all margins we have the following

3) SMCM = ECM + SM + EM

Substituting formula 3) in formula 2) above we get the following:

4) SP = SMCM + i

Formula 4 above simply says that the sustainability market price(SP) is equal to the sustainability market cost margin(SMCM) at a profit(i).

Therefore, it is possible to conceived sustainability markets operating at zero profits if we make i = 0 transforming Formula 4) above into:

5) ZSP = SMCM

Hence, the zero profit sustainability production price(ZSP) covers only all cost margins, economic, social, and environmental..

The production price structure of partnership based models

We can use the for profit sustainability price in formula 2) above to extract the production price structure of the three possible partnership based models after making corresponding assumptions, red markets(RM), green markets(GM) and the socio-environmental model(SENM) as shown below:

The for profit sustainability market production price structure(SP) is the following:

6) SP = ECM + i + SM + EM

i) The red market production price(RP)

The red market(RM = ABc) is a socially friendly market or reflect socially friendly capitalism as it is a partnership between society and the economy only; and therefore the environmental margin is zero(EM = 0): And substituting EM = 0 in formula 6) we get:

7) RP = ECM + i + SM + 0 = ECM + i + SM = P + SM since P = ECM + i

Formula 7) above tells us that the red market price(RP) is the for profit traditional market price(P) plus the social externality margin(SM) needed to make it socially friendly or it is the red socialist price(RSP) plus the economic margin(ECM) and profits(i) needed to make the red socialist model(RSM) economy friendly.

Since the red market cost margin(RMCM) is the sum of all margins we have the following:

8) RMCM = ECM + SM and when substituting this in formula 7) we get:

9) RP = RMCM + i

Therefore, the red market price(RP) is equal to the red market cost margin(RMCM) at a profit(i).

Notice that it is possible to think about red markets(RM) operating at zero profits if i = 0 and then formula 9) is transformed into the zero profit red market price(ZRP).

10) ZRP = RMCM

Formula 10) above say that the zero profit red market production price(ZRP) covers only all margins, social and economic.

ii) The green market production price(GP)

Green markets(GM = aBC) are environmentally friendly markets or reflect environmentally friendly capitalism as they are a partnership between the economy and the environment; and therefore SM = 0. If we substitute SM = 0 in formula 6) above we get the following:

11) GP = ECM + i + EM = P + EM since P = ECM + i

Formula 11) above says that the green market price(GP) is the economic margin(ECM) plus the environmental margin(EM) at the profit(i) or it is the for profit traditional market price(P) plus the environmental margin(EM).

Since the green market cost margin(GMCM) is the sum of all margins we have the following:

12) GMCM = ECM + EM

Therefore, the green market cost margin(GMCM) reflects only the economic margin(ECM) and the environmental margin(EM). Substituting formula 12) into formula 11) we get the following:

13) GP = GMCM + i

Hence, the green price(GP) is the green market cost margin(GMCM) at a profit(i).

Formula 13) above suggest that we can view green markets as producing at zero profit if we make i = 0 and in that case Formula 13) becomes:

14) ZGP = GMCM

Formula 14) says that zero profit green production price(ZGP) covers only the green market cost margin(GMCM).

iii) The socio-environmental model production price(SENP)

The socio-environmental model(SENM = AbC) is a socially friendly environmental model as it is a partnership between society and the environment; and therefore ECM = i = 0.
Substituting this in formula 6) above we get:

15) SENP = SM + EM

Formula 15) above says that the socio-environmental production price(SENP) covers only the social margin(SM) and environmental margin(EM).

Since the socio-environment model cost margin(SENCM) is the sum of all margins we have the following:

16) SENCM = SM + EM

Hence consistent with formula 16) above the socio-environmental cost margin(SENCM) is the sum of the social margin(SM) and the environmental margin(EM); and substituting this in formula 15) we get:

17) SENP = SENCM

And therefore, these socio-environmental models are meant to operate at a total economic loss as the socio-environmental production price(SENP) equals the socio-environmental cost margin(SENCM)

The production price structure of deep world view based models

Again we can use the for profit sustainability price in Formula 2) above to do this extraction after subjecting it to specific deep model assumptions:

The sustainability market price(SP) is:

18) SP = ECM + i + SM + EM

i) The red socialism model(RSM)

The red socialism model(RSM = Abc) is a society only model; and therefore ECM = i = EM = 0 so formula 18) is transformed into:

19) RSP = SM

Formula 19) above clearly says that the red socialist production price(RSP) reflects only the social margin(SM); and therefore, it operates at a total economic loss and it assumes environmental externality neutrality. In other words, the red socialist model(RSM) assumes economic and environmental externality neutrality. Only society is the endogenous factors, the economy and the environment exist only to meet social goals.

ii) The bare capitalism model(TM)

The traditional market model is(TM = aBc) a for profit economy only model; and therefore SM = EM = 0 so formula 18) above becomes**:**

20) TMP = ECM + i = P

Therefore, the traditional market price(TMP) reflects the economic margin(ECM) at a profit(i) or it is equal to the for profit traditional market price(P) as it assumes social and environmental externality neutrality. Only the economy is the endogenous factor, the society and the environment exist only to meet economic goals.

iii) The deep environmentalism model(ENM)

The environmental model(ENM = abC) is an environment only model; and therefore SM = ECM = i = 0 so formula 18) becomes:

21) ENP = EM

Formula 21) above clearly says that the environmental model production price(ENP) reflects only the environmental margin(EM); and therefore, it operates at a total economic loss and assumes social externality neutrality. In other words, the environmental model(ENM) assumes economic and social externality neutrality. Only the environment is the endogenous factor, the society and the economy exist only to meet environmental goals.

Linking the production price structure of all markets

The production price structure of all models derived from the sustainability market price(SP) and described above in detail can be summarized as in Figure 1 below:

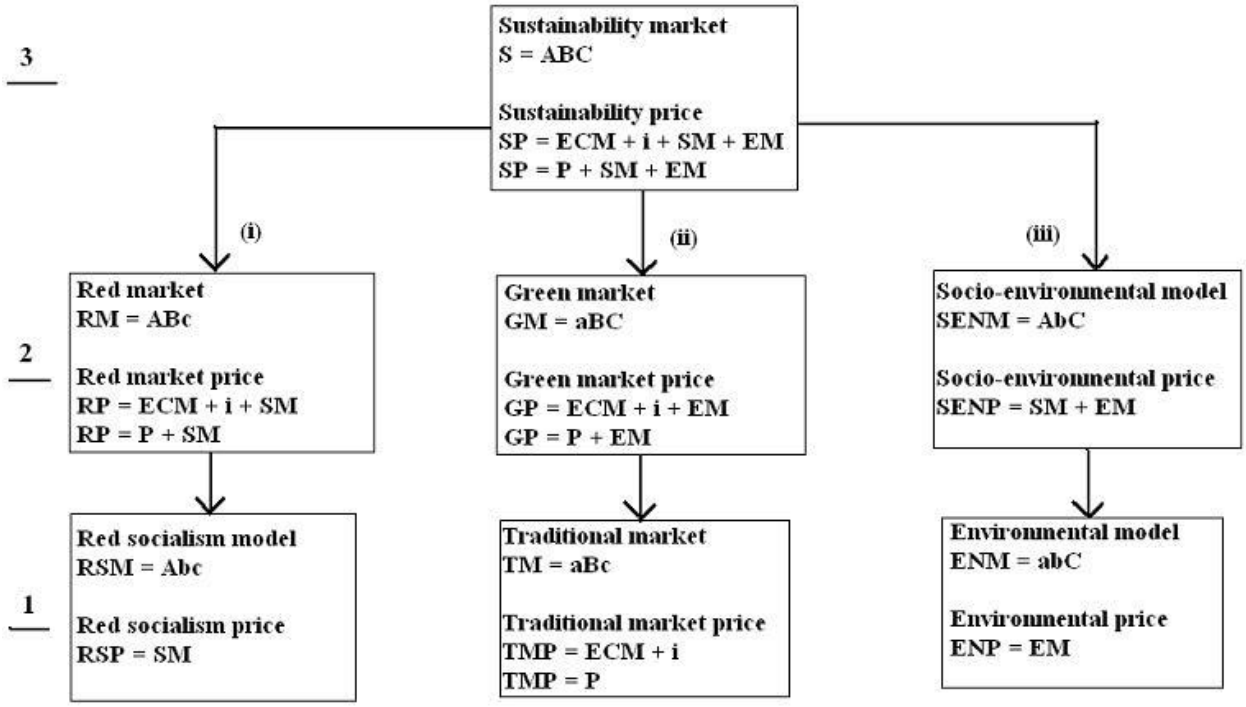

Figure 1 Diriving production prices from the sustainability market price

We can see in Figure 1 above that all production price structures can be organized in three levels or rows: a) Level 1, the lower level structures made up of deep paradigm based models : red socialist model(RSM), traditional market model(TM) and environmental model(ENM); b) Level 2, the middle level model structures made up by partial partnership based paradigms: red market(RM), green market(GM), socio-environmental model(SENM); and c) Level 3, the top level structures made up of full partnership based models: the sustainability market(S).

Figure 1 above also let us see that models can be extracted from the sustainability price(SP) in 3 difference branches or columns: a) the social branch column marked (i) reflecting sustainability price(SP), red market price(RP) and red socialist price(RSP); b) the economy

branch column marked (ii) relating the sustainability price(SP), the green market price(GM) and the traditional market price(TMP); and c) the environmental branch column marked (iii) connecting the sustainability price(SP), the socio-environmental price(SENP) and the environmental model price(ENP).

More over Figure 1 above lets us see the following: a) there are model operating at a total economic loss such as the red socialist model(RSM), the environmental model(ENM); and the socio-environmental model(SENM); and b) there are 4 for profit price structures, the traditional market(TM), the red market(RM), the green market(GM) and the sustainability market(S).

Highlighting the direction of paradigm shifts and needed corrections

Notice that if we reverse the direction of the arrows in Figure 1 above then we can appreciate the direction of paradigm shifts and the corrections or cost internalization actions that need to be taken for those paradigm shifts to happen as shown in Figure 2 below:

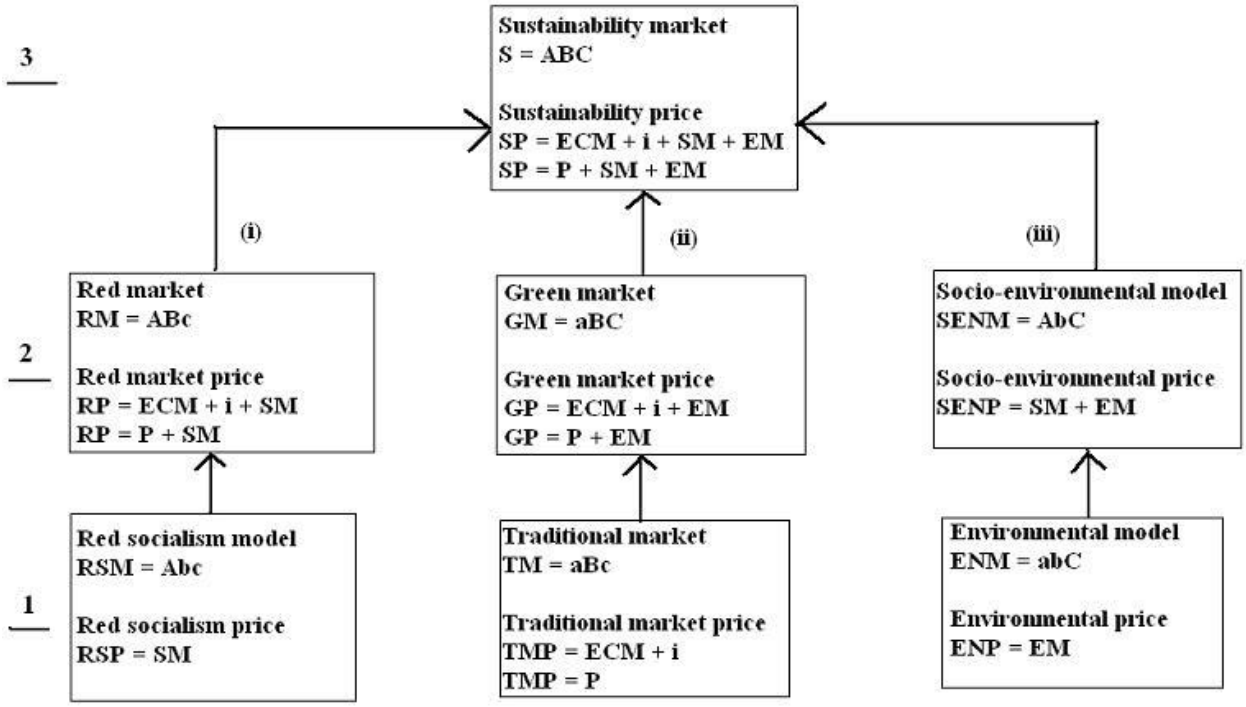

Figure 2 The direction and type of correction needed to move each model towards more inclusive/sustainable structures

Figure 2 above can let us see clearly the following: a) that paradigm shifts from the bottom up, from lower levels to higher levels to increase their stability; b) that paradigms in the same level or row are competing paradigms; c) that the highest level of paradigm evolution is the sustainability market(S); and d) that models in the same column can be seen from level 1 up as

step by step corrections or as full corrections if cost internalization is done step by step or at once.

The social branch in Figure 2 above marked (i) tells us that a) to make the red socialism model(RSM) economy friendly we need to add or internalize the for profit traditional market price(P) to shift it to red markets(RM); and b) to make the red market(RM) environmentally friendly we need to add or internalize the environmental margin(EM) and shift it to sustainability markets(S).

The economy branch in Figure 2 above marked (ii) indicates us that a) to make the traditional market model(TM) environmentally friendly we need to add or internalize the environmental externality margin(EM) to shift it to green markets(GM); and b) to make the green market(GM) socially friendly we need to add or internalize the social externality margin(SM) and shift it to sustainability markets(S).

The environment branch in Figure 2 above marked (iii) says that a) to make the environmental model(ENM) socially friendly we need to add or internalize the social margin(SM) to shift it to socio-environmental model(SENM); and b) to make the socio-environmental model(SENM) economy friendly we need to add or internalize the for profit traditional market price(P) and shift it to sustainability markets(S).

And finally Figure 2 above can be used to point out the following aspects: a) Full correction of the red socialist model(RES) or of the traditional market model(TM) or of the environmental model(ENM) shift them towards sustainability markets(S); and b) Partial correction of the red market(RM) to make it environmentally friendly or of the green market(GM) to make it socially friendly or of the socio-environmental market to make it for profit economy friendly shift them towards sustainability markets(S).

Highlighting old and future cold war structures and paradigms shifts

Notice that we can transform Figure 2 above into Figure 3 below to highlight old and new cold war structures, paradigm shifts, and nonexistent development branches:

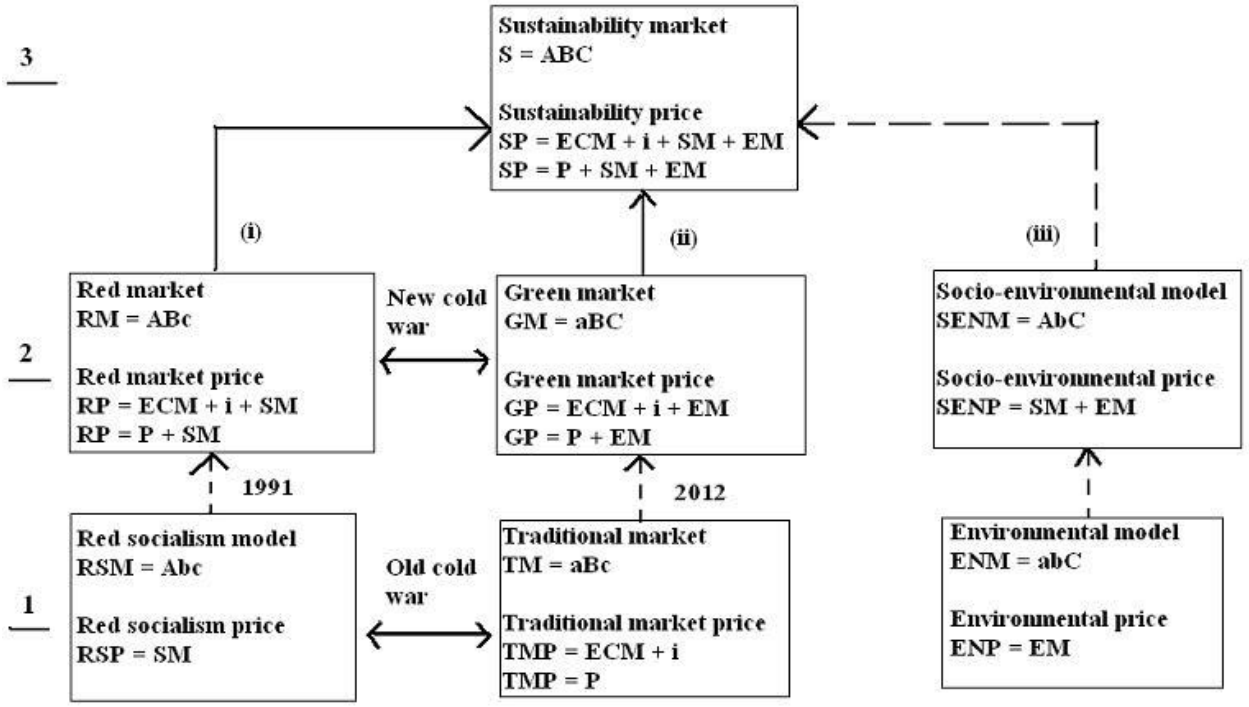

Figure 3 Cold wars and paradigm shifts are pushing competing development models towards sustainability

Figure 3 above help us to point out the following four things: a) that the environment branch of paradigm evolution marked (iii) never took place so it can be left out of the analysis as shown by the broken arrows; b) that there was a cold war at level 1 of deep paradigms(red socialism(RSM) vrs bare capitalism/traditional market(TM)) that ended in 1991 with the death of red socialism(RSM) and the birth of socially friendly capitalism or red markets(RM); c) there was a paradigm shift from red socialism to red markets as the result of this in 1991; d)that there was a paradigm shift from traditional market(TM) to green market(GM) in 2012 highlighting the death of Adam Smith's perfect market thinking and the birth of perfect green market thinking; e) that we have now in place the new cold war structure(red capitalism/red markets vrs green capitalism/green markets) at the level of partnership based paradigms or level 2, which sooner or later will induce a shift towards sustainability markets; and f) that the last step of paradigm evolution for all branches is the sustainability market(S) or level 3)

And finally Figure 3 can also be used to indicate the following aspects: a) Level 1 models are dead today, the era of fully dominant paradigms is over, red socialism thinking and traditional perfect market thinking are things of the past; b) Level 2 models rule today, we are living in an era of partial partnership based development, red markets rule life in former red socialist countries and green markets rule life in old capitalist countries; and c) Level 3 is the future market, the market of the future, the sustainability market(S), a full partnership based market.

Full paradigm shift paths towards sustainability

Figure 2 above can be redesigned again to highlight in detail the three different full paradigm shift paths towards sustainability as follows:

a) The full red market paradigm shift path

It can be said that red markets(RM = ABc) can come about if we correct the red socialism model(RES) to make it for profit economy friendly or from correcting Adam Smith's traditional market model(TM) to make it socially friendly, a situation shown in Figure 4 below:

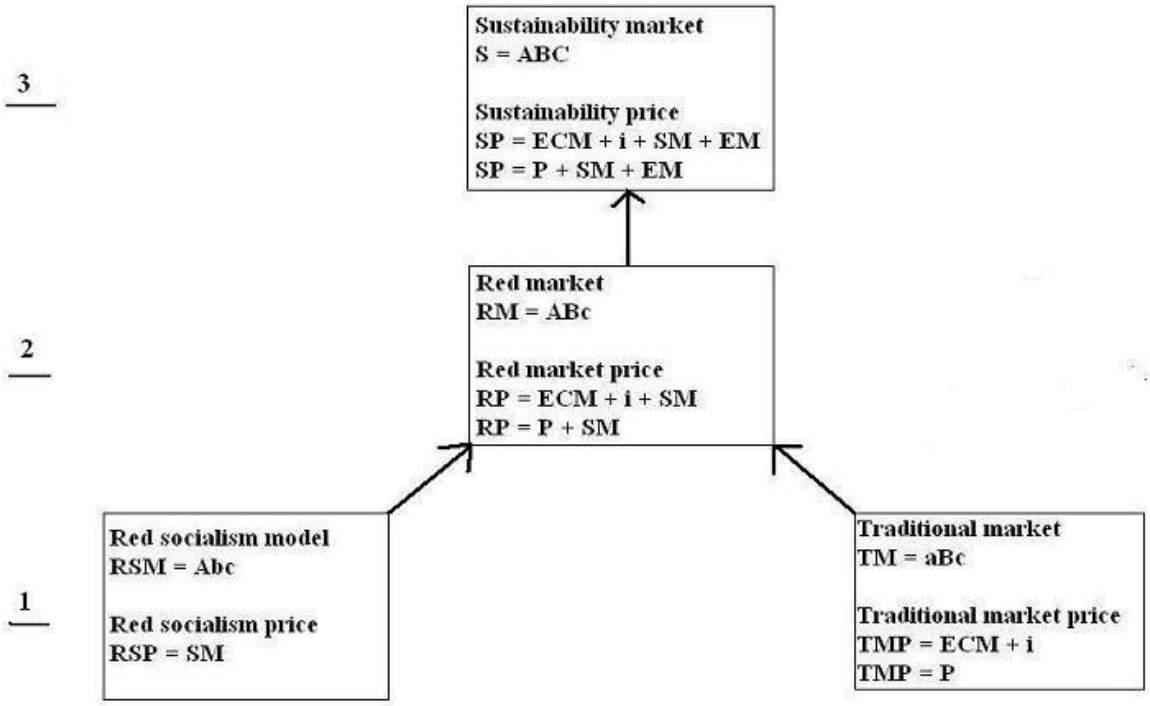

Figure 4 The full red market paradigm shift path towards sustainability

Figure 4 above clearly shows that the only evolutionary path available to red markets(RM) is the sustainability market(S)

b) The full green market paradigm shift path

It can be said that green markets(GM = aBC) can come about if we correct the traditional market model(TM) to make it environmentally friendly or if we correct the environmental model(ENM) to make it for profit economy friendly, a situation indicated in Figure 5 below:

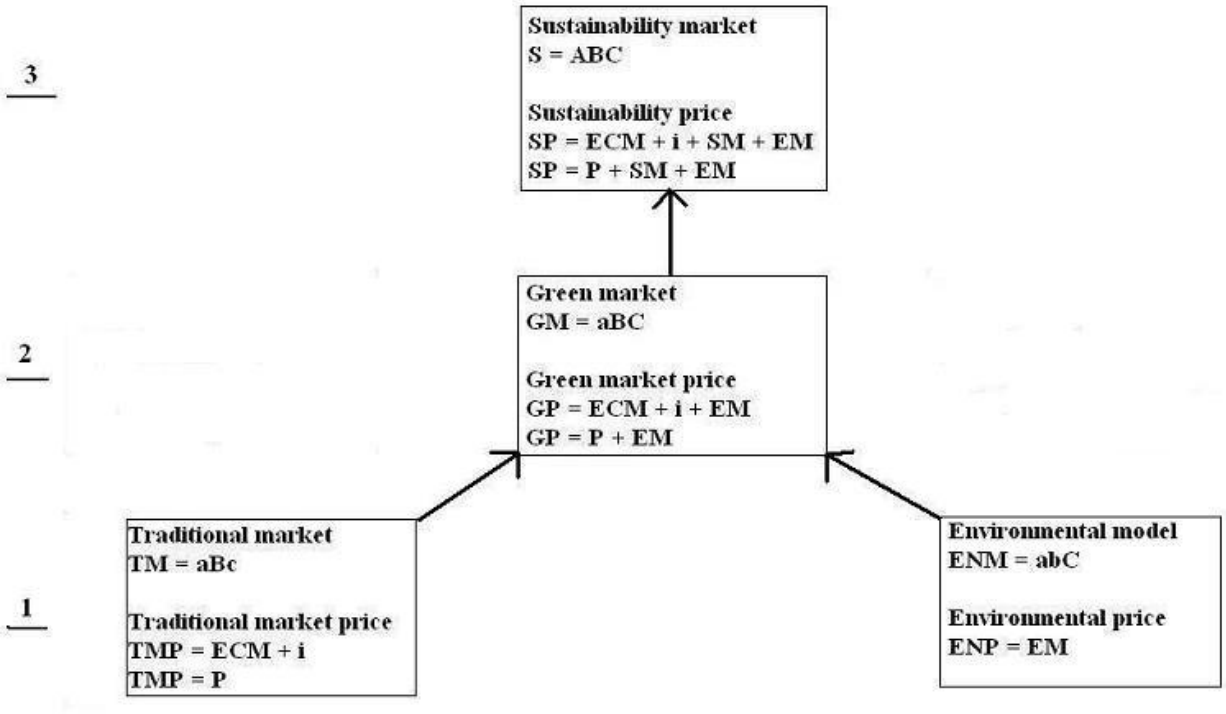

Figure 5 The full green market paradigm shift path towards sustainability

Figure 5 above clearly indicates that the only evolutionary path available to green markets(GM) is the sustainability market(S)

c) The full socio-environmental shift path

It can be said that the socio-environmental model(SENM = AbC) can come about if we correct the red socialism model(RES) to make it environmentally friendly or if we correct the environmental model(ENM) to make it socially friendly as represented in Figure 6 below:

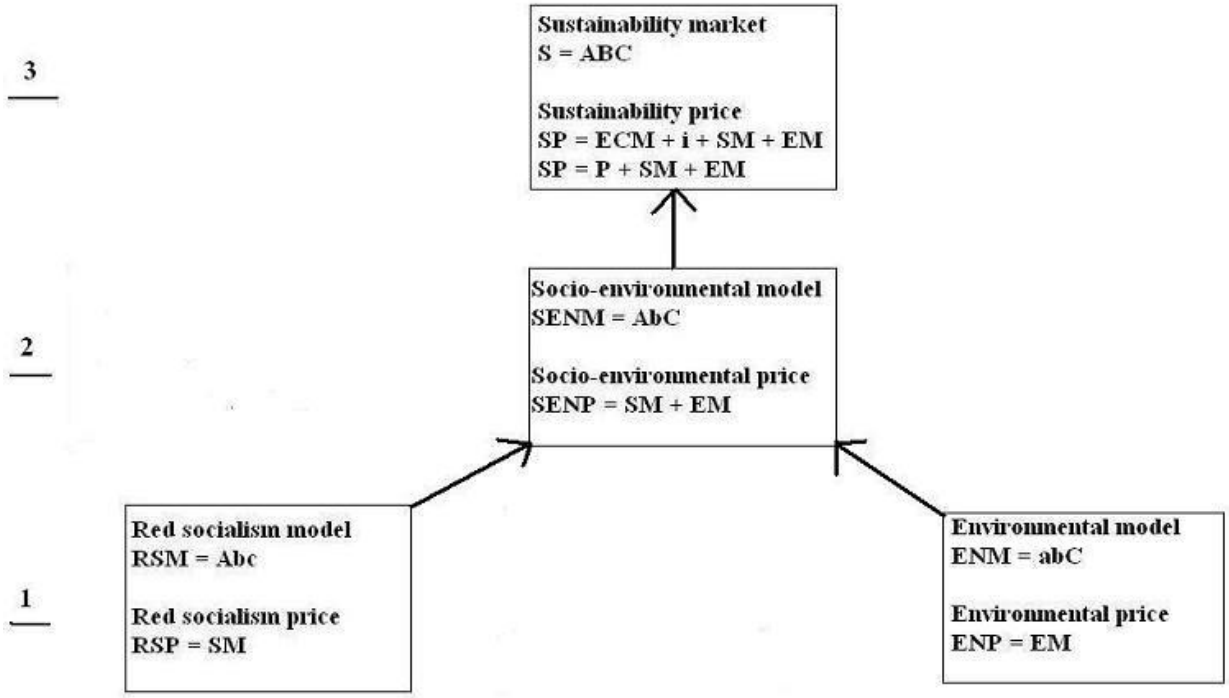

Figure 6 The full socio-environmental paradigm shift path towards sustainability

Figure 6 above clearly states that the only evolutionary path available to socio-environmental models(SENM) is the sustainability market(S)

Food for thoughts

a) Since Karl Marx was aware that production price equal to cost-price plus profit(KP = C + i) and he was not fan of where the profits were going, was he proposing socially friendly capitalism(KP = SM + ECM + i = SM + P) or red markets as the long road towards red socialism in his time in 3 stages of development, social cost, zero profit, and for profit, with the profits in the third stage going to the state common fund?. I think probably yes, what do you think?

b) Was red socialism always producing at a full economic loss to meet social goals? I think yes, what do you think?

c) Can red markets be seen as a correction of Adam Smith's traditional market model to make it socially friendly I think yes, what do you think?

d) Were red socialism production prices and traditional market prices different, but extreme distortions of the sustainability market price?, I think yes, what do you think?

Conclusions

First, it was shown in detail how the sustainability market price can be used to derived based on specific assumptions the production price structures of all possible lower level models, be it partnership based or deep paradigm thinking based models. Second, it was indicated how all these price structures can be organized in framework that can be used to highlight three different levels of sustainability as well as the three possible different branches of paradigm evolution, social branch, economy branch and the environmental branch connected by arrows that move away from sustainability markets . Third, it was pointed out that reversing the arrows on the price structure framework and directing them towards sustainability markets you can see clearly the corrections or cost internalization actions that need to be made to shift paradigms from lower levels to higher levels and achieve higher stability until we reach the structure of the sustainability market.

Fourth, it was stressed that the paradigm evolution framework given can be redesigned to show the structure of the old cold war, the structure of the paradigm shift from red socialism to red markets, the structure of the paradigm shift from traditional markets to green markets, the structure of the future cold war, and the fact that the environmental branch of the paradigm evolution framework can be left out as it has never existed or it was never materialized. Fifth, I was indicated that the full paradigm shift path of red markets, of green markets and of socio-environmental models leads them straight towards sustainability. And finally, it can be stressed that consistent with all the Figures shared, the last paradigm evolution step, from all directions, is the sustainability market.

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