True sustainability thinking 102: How can we show in simple terms that going from linear traditional market thinking to circular traditional market thinking is not a critical socio-environmental pollution production problem-solving move? What are the implications of this?

By

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Abstract

The structure of the Adam Smith's perfect traditional market model that was in place from 1776 to 1987 stayed without real formal criticism for assuming socio-environmental externality neutrality until the Brundtland Commission indicated in 1987 that this traditional model needed to be made socio-environmentally inclusive as assuming that traditional market prices are not distorted in socio-environmental terms, assuming that a world under resource use inefficiency was fine, and assuming that the traditional market can expand for ever without the producing critical socio-environmental pollution production problems they had documented based on negative socio and environmental evidence and impacts at hand that by then was wrong as these issues had become so critical that they could no longer be assumed away or hide. In other words, the Brundtland Commission recognized that issues like distorted market pracing, resource use inefficiency and socio-environmental pollution production problems must be included in or internalized in economic thinking if solving the socio-environmental crises was the aim. From 1987 to 2022/2023 the world tried to solved this socio-environmental sustainability issue first by using sustainable development means, and later by using dwarf green markets means, both tools aimed at managing the consequence of a market world under socio-environmentally distorted market prices, in the first case, and managing the consequences of environmentally distorted market prices, in the second case: in both cases priority was given to patching the system, not to fully fixing the system. Since 2022-2023 to now the world decided to manage another consequence of socio-environmentally distorted market pricing, namely resource use inefficiency by placing linear market thinking under circular market thinking while leaving the distorted structure of the linear traditional market the same, meaning under socio-environmentally distorted market pricing and under the assumption that the circular economy can grow for ever without producing critical socio-environmental pollution production problems: Here priority is given to fixing the resource use inefficiency problem in linear traditional markets, not on fully or partially fixing the socio-environmental pollution production problem

associated now with both the linear traditional market and the circular traditional market as in reality today both of those market pricing mechanisms are still distorted in socio-environmental terms, and both markets are still socio-environmental pollution production markets. Hence, understanding the structure of the circular traditional market that comes along when we care about resource use inefficiency only gains relevance in terms of current and future economic development vrs true sustainability based development discourse specially if presented in simple, not in complex terms, as a positive labeling does not necessarily means socio-environmental pollution production unfriendliness as pollution production markets regardless labeling are still pollution production markets. And this raises the following questions: How can we show in simple terms that going from linear traditional market thinking to circular traditional market thinking is not a critical socio-environmental pollution production problem-solving move? What are the implications of this?

Key concepts

Linear tradition market, circular traditional market, socio-environmental pollution production problem, optimal market prices, distorted traditional market prices, distorted circular traditional market prices, resource use inefficiency, resource use efficiency, socio-environmental externality neutrality assumption, no socio-environmental externality neutrality assumptions

Introduction

a) The structure of the distorted traditional linear economy loop under externality production neutrality assumptions

From 1776 to 1987 the traditional perfect market thinking that Adam Smith gave to the world(Smith 1776), where we produce, consume and discard, has remained unchanged, and the structure of this linear market thinking as a loop has been recently highlighted in detail(Muñoz, 2026) as indicated in Figure 1 below:

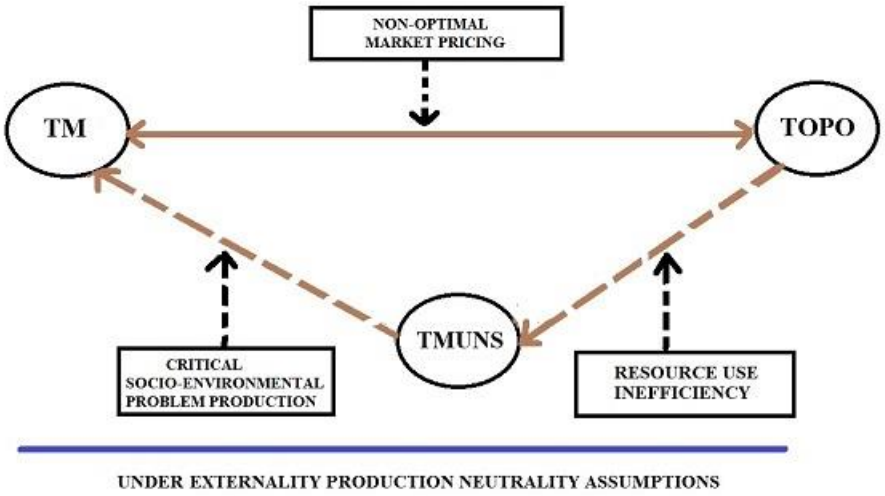

Figure 1 **The traditional market paradigm loop (TM) under socio-environmental externality neutrality assumptions**

Figure 1 above tells us that linear traditional market thinking (TM) produces traditional optimal outcomes (TOPO) as indicated by the continuous arrow from TM to TOPO, and traditional optimal outcomes (TOPO) on the other hand support the working of linear markets (TM); and this loops works this way because traditional linear market thinking assumes socio-environmental externality production neutrality, which means that this market has no limits to growth, it can expand for ever without producing socio-environmental externalities. In other words, the externality neutrality assumption renders real issues such as non-optimal market pricing issues, resource use inefficiency issues and critical socio-environmental pollution production problems issues exogenous to the linear model so they can be assumed away as indicated by the broken arrows in Figure 1 above.

The problem:

The linear traditional market loop assumes that distorted market pricing, resource use inefficiency and socio-environmental production problems cannot happen, but in 1987 the World Commission on sustainable development documented in detail that they happened, and this assumption needs to be corrected.

Implication 1:

Assuming socio-environmental externality neutrality creates the conditions for socio-environmental problems to form in front of your eyes through time as you are not expecting them when you are assuming real issues away.

b) **The structure of the distorted traditional linear economy loop under no externality production neutrality assumptions**

If we remove the externality neutrality assumption to recognize critical issues as real issues that cannot be assumed away and which should be internalized we transform the world in Figure 2 above into the world in Figure 3 below:

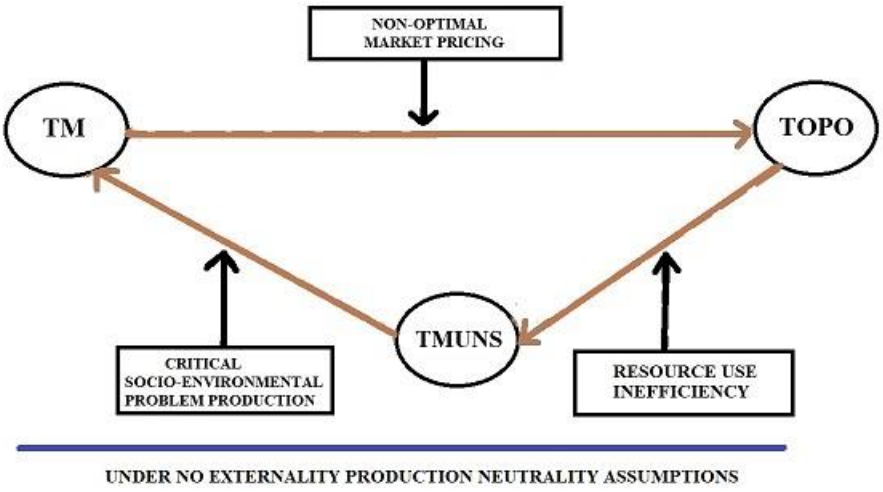

Figure 2 The traditional market paradigm loop (TM) under no socio-environmental externality neutrality assumptions

Figure 2 above clearly tells us that that traditional market thinking as we know it operate in real life under non-optimal market prices, under resource use inefficiency and under socio-environmental pollution production as it works and expands as traditional market prices as we know are socio-environmentally distorted market prices.

The problem:

The linear traditional market loop is affected by distorted market pricing, resource use inefficiency and socio-environmental production problems, reason why in 1987 the World Commission on sustainable development recommended a sustainability patch by leading the world towards socio-environmentally inclusive sustainable development thinking.

Implication 2:

Recognizing that no socio-environmental externality neutrality assumptions exist creates the conditions for socio-environmental problems to be fixed, fully or partially as you can no longer assume them away.

c) The 1987 call to internalize socio-environmental externalities through partial socio-environmental solutions

In 1987 the Brundtland commission (WCED 1987) formally documented that the socio-environmental problems of the day meant that this socio-environmental neutrality assumption was wrong and we needed to correct this by making development thinking socio-environmentally responsible, a situation summarized in Figure 3 below:

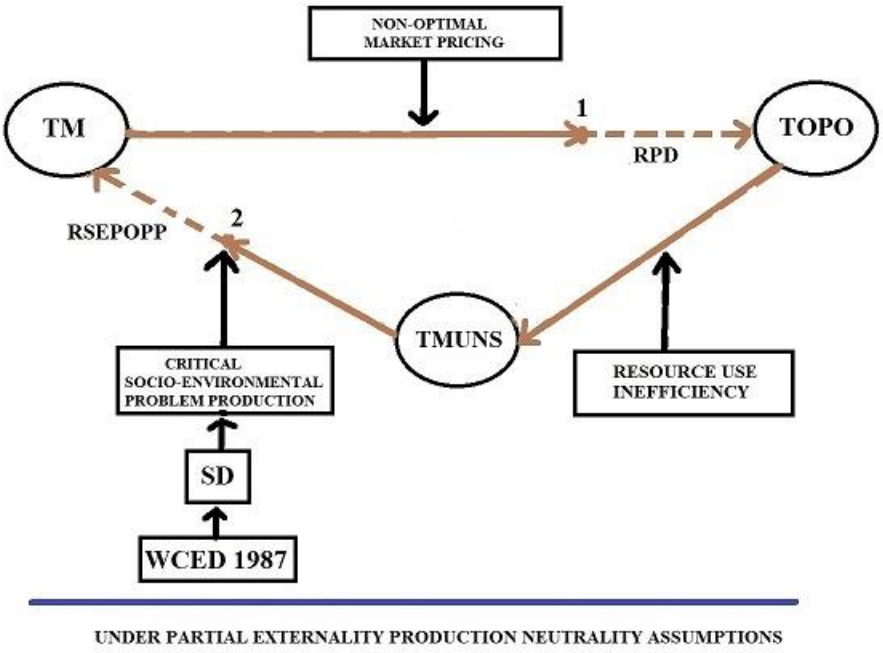

Figure 3 The 1987 move from traditional markets (TM) to sustainable development based markets (SD)

Figure 3 above shows that sustainable development solutions (SD) such as the one at point 2 implemented since 1987 are patches or partial solutions to critical socio-environmental pollution production problems as only a portion of the critical problem is internalized or managed as indicated by the brown arrow from TMUNS to point 2 leaving still a remaining socio-environmental pollution production problem(RSEPOPP) as indicated by the broken brown arrow from point 2 to TM; and this is because only partial socio-environmental costs are reflected in the pricing mechanism as there is no full true cost pricing as indicated by the continuous brown arrow from TM to point 1 leaving still a remaining market price distortion (RPD) as indicated by the broken brown arrow from point 1 to TOPO.

The problem:

The Brundtland commission recommended a partial solution to the socio-environmental pollution production problem a la sustainable development based markets, not a full solution a la true sustainability markets.

Implication 3:

Partial solutions a la sustainable development cannot be expected to solve the socio-environmental crisis as they still operate under remaining socio-environmental sustainability gaps as market prices are still distorted, resource use inefficiency still takes place, and socio-environmental pollution production is still happening.

d) The 2012 call to internalized environmental externalities through partial environmental solutions

In 2012 Rio + 20 process(UNCSD 2012a; UNCSD 2012b) it was recognized that attention to environmental problem inclusion should be now the priority to bring development thinking away from traditional thinking and toward green economic thinking, a situation shown in Figure 4 below:

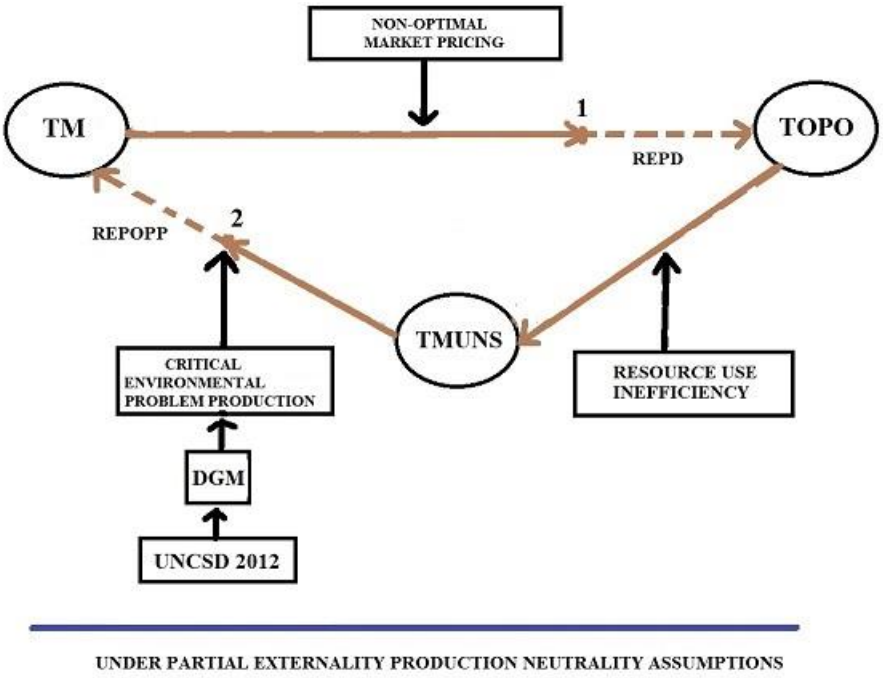

Figure 4 The 2012 move from traditional markets (TM) to dwarf green markets (DGM)

Figure 4 above indicates that dwarf green market solutions (DGM) such as the one at point 2 implemented since 2012 are patches or partial solutions to critical environmental pollution production problems as only a portion of the critical problem is internalized or managed as indicated by the brown arrow from TMUNS to point 2 leaving still a remaining environmental pollution production problem(REPOPP) as indicated by the broken brown arrow from point 2 to TM; and this is because only partial environmental costs are reflected in the pricing mechanism as there is no full true cost pricing as indicated by the continuous brown arrow from TM to point 1 leaving still a remaining market price distortion in environmental terms (REPD) as indicated by the broken brown arrow from point 1 to TOPO.

The problem:

The United Nations Commission on Sustainable Development implemented a partial solution to the environmental pollution production problem a la dwarf green markets, not a full solution a la true green markets.

Implication 4:

Partial solutions a la dwarf green markets cannot be expected to solve the environmental crisis as they still operate under remaining environmental sustainability gaps as market prices are still distorted, resource use inefficiency still takes place, and environmental pollution production is still happening.

e) The 2022-2023 sudden call to move from linear market thinking to circular market thinking

The situation created by the decision of academics and policy makers and institutions to move from linear market thinking to circular market thinking to address a consequence of linear market socio-environmental price distortions, created a non-science based situation depicted in Figure 5 below:

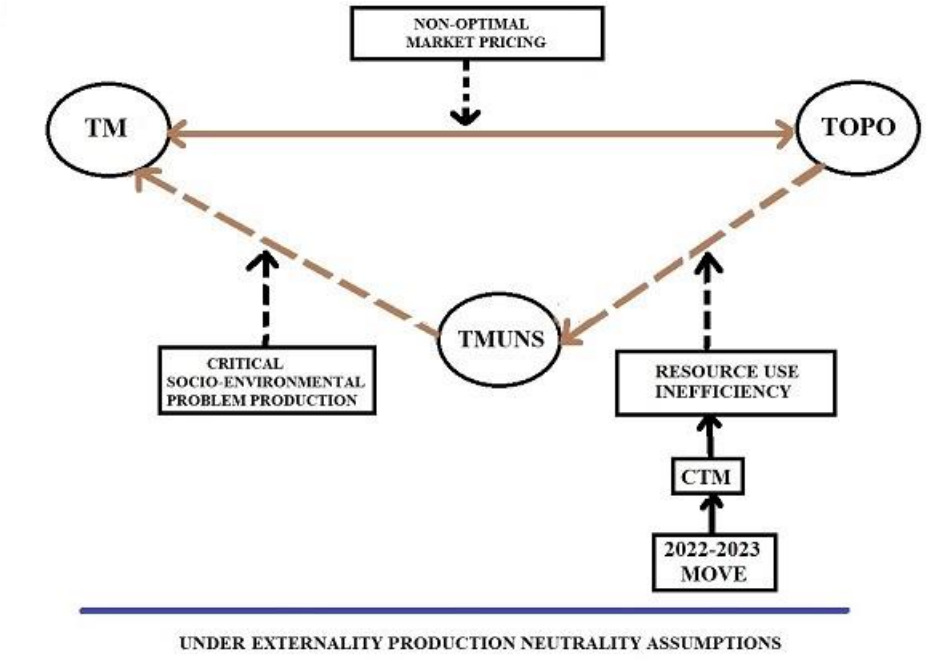

Figure 5 The move to address the resource use inefficiency problem of the traditional linear market

We can see in Figure 5 above that to the rights we have the implementation of circular traditional market thinking to address a consequence of socio-environmentally distorted linear traditional markets leaving the critical socio environmental problem production problem and the non-optimal market pricing problem as it is in reality, just assuming them away, and helping to the understating of the nature and implications of this move from linear to circular from the true sustainability angle is among the goals of this paper.

f) The need to understand the implications of the 2022/2023 call to move from distorted traditional linear economy loop thinking to distorted circular economy loop thinking with no direct link to solving the critical socio-environmental pollution production crisis

Consistent with the discussion above it can be said that the structure of the Adam Smith's perfect traditional market model(Smith 1776) that was in place from 1776 to 1987 stayed without real formal criticism for assuming socio-environmental externality neutrality until the Brundtland Commission indicated in 1987(WCED 1987) indicated that this traditional model needed to be made socio-environmentally inclusive as assuming that traditional market prices are not distorted in socio-environmental terms, assuming that a world under resource use inefficiency was fine, and assuming that the traditional market can expand for ever without the producing critical socio-environmental pollution production problems they had documented based on negative socio and environmental evidence and impacts at hand that by then was wrong as these issues had become so critical that they could no longer be assumed away or hide.

In other words, the Brundtland Commission (WCED 1987) recognized that issues like distorted market pricing, resource use inefficiency and socio-environmental pollution production problems must be included in or internalized in economic thinking if solving the socio-environmental crises was the aim. From 1987 to 2022/2023 the world tried to solved this socio-environmental sustainability issue first by using sustainable development means (WCED 1987), and later by using dwarf green markets means(UNCSD 2012a; UNCSD 2012b), both tools aimed at managing the consequence of a market world under socio-environmentally distorted market prices, in the first case, and managing the consequences of environmentally distorted market prices, in the second case: in both cases priority was given to patching the system, not to fully fixing the system. Since 2022-2023 to now the world decided to manage another consequence of socio-environmentally distorted market pricing, namely resource use inefficiency by placing linear market thinking under circular market thinking while leaving the distorted structure of the linear traditional market the same, meaning under socio-environmentally distorted market pricing and under the assumption that the circular economy can grow for ever without producing critical socio-environmental pollution production problems: Here priority is given to fixing the resource use inefficiency problem in linear traditional markets, not on fully or partially fixing the socio-environmental pollution production problem associated now with both the linear traditional market and the circular traditional market as in reality today both of those market pricing mechanisms are still distorted in socio-environmental terms, and both markets are still socio-environmental pollution production markets.

Hence, understanding the structure of the circular traditional market that comes along when we care about resource use inefficiency only gains relevance in terms of current and future economic development vrs true sustainability based development discourse specially if presented in simple, not in complex terms, as a positive labeling does not necessarily means socio-environmental pollution production unfriendliness as pollution production markets regardless labeling are still pollution production markets. It has been pointed out that assuming that real distortions do not exist has negative consequences when we expect positive ones (Muñoz 2024) creating a golden paradigm with a mask (Muñoz 2026), be it a linear golden paradigm or a circular golden paradigm. And this raises the following questions: How can we show in simple

terms that going from linear traditional market thinking to circular traditional market thinking is not a critical socio-environmental pollution production problem-solving move? What are the implications of this?

Objectives

1) To point out the structure of the circular traditional market both under socio-environmental pollution production neutrality assumptions and without them; 2) To stress the implications of circular traditional markets still as socio-environmental pollution markets both under socio-environmental pollution production neutrality assumptions; and 3) To highlight the mismatch of placing the world under externality production neutrality assumptions into the world where there are no externality production neutrality assumptions.

Methodology

a) The operational concepts and analytical tools relevant to this paper are shared; b) The structure of the circular traditional market loop under externality neutrality assumptions is indicated; c) The structure of the circular traditional market loop under no externality neutrality assumptions is pointed out; d) The contradictions embedded in the structure of the circular traditional market loop under no externality neutrality assumptions are stressed; e) The structure of the circular traditional market after removing the distortions under socio-environmental pollution production neutrality assumptions is shown; f) The structure of the circular traditional market after removing the distortions under no socio-environmental pollution production neutrality assumptions is described; and g) some food for thoughts and relevant conclusions are provided.

Terminology

FLP = Flawed paradigm NOPO = Non-optimal outcomes

UNS = Unsustainability conditions TM = Traditional market paradigm

TMUNS = Traditional markets unsustainability conditions

TOPO = Traditional optimal outcomes

CTM = Circular traditional market

CTMUNS = Circular traditional market unsustainability conditions

CTOPO = Circular optimal outcomes

FCE = Full cost externalization FSECE = Full socio-environmental cost externalization

RSP = Remaining sustainability problem

RSESP = Remaining socio-environmental sustainability problems

SESGP = Socio-environmental sustainability problems

RSESG = Remaining socio-environmental sustainability gap

SESG = Socio-environmental sustainability gap

NRSP = No remaining sustainability problem

NRSESP = No remaining socio-environmental sustainability problem

POPP = Pollution production problem

SEPOPP = Socio-environmental pollution production problem

RPD = Remaining price distortion

REPD = Remaining environmental price distortion

NREPD = No remaining environmental price distortion

REPOPP = Remaining environmental pollution production problem

NREPOPP = No remaining environmental pollution production problem

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Operational concepts

1) Flawed paradigm, *a world with abnormalities embedded in it.*

2) Non-optimal outcomes, *those that take place under abnormality externalization, fully or partial.*

3) Flawed paradigm, *a world with abnormalities embedded in it.*

4) Non-optimal outcomes, *those that take place under abnormality externalization, fully or partial.*

5) Linear flawed paradigm, *a linear world with abnormalities embedded in it.*

6) Linear non-optimal outcomes, *those that take place under linear abnormality externalization, fully or partial.*

7) Circular flawed paradigm, *a circular world with abnormalities embedded in it.*

8) Circular non-optimal outcomes, *those that take place under circular abnormality externalization, fully or partial.*

9) Unsustainability conditions, *those that feed non-optimal development.*

10) Linear unsustainability conditions, *those that feed linear non-optimal development.*

11) Circular unsustainability conditions, *those that feed circular non-optimal development*.

12) Traditional market paradigm, *a world with socio-environmental abnormalities embedded in it, a linear flawed paradigm.*

13) Circular market paradigm, *a world with socio-environmental abnormalities embedded in it, a circular flawed paradigm.*

14) Traditional optimal outcomes, *the ones under full socio-environmental externality neutrality assumptions and resource use inefficiency, but with linear market failures in reality.*

15) Circular optimal outcomes, *the ones under full socio-environmental externality neutrality assumptions and resource use efficiency, but with circular market failures in reality.*

16) Traditional market unsustainability conditions, *those which lead to the production of linear critical socio-environmental problems.*

17) Circular market unsustainability conditions, *those which lead to the production of circular critical socio-environmental problems.*

18) Full cost externalization, *all externality costs are left out of pricing mechanism of market.*

19) Full socio-environmental cost externalization, *all socio-environmental externality costs are left out of the pricing mechanism of the market.*

20) Linear socio-environmental cost externalization, *all socio-environmental externality costs are left out of the pricing mechanism of the linear market.*

21) Circular socio-environmental cost externalization, *all socio-environmental externality costs are left out of the pricing mechanism of the circular market.*

22) Traditional market price, *the one that clears the linear traditional market.*

23) Circular market price, *the one that clears the circular traditional market.*

24) Externality production neutrality assumptions*, the flawed paradigm can expand for ever without producing externalities;*

25) No externality production neutrality assumptions, *the flawed paradigm cannot expand for ever without producing externalities.*

26) Linear externality production neutrality assumptions, *the linear flawed paradigm can expand for ever without producing externalities;*

27) No linear externality production neutrality assumptions*, the linear flawed paradigm cannot expand for ever without producing externalities.*

28) Circular externality production neutrality assumptions, *the circular flawed paradigm can expand for ever without producing externalities.*

29) No circular externality production neutrality assumptions, *the circular flawed paradigm cannot expand for ever without producing externalities.*

The structure of the circular traditional market loop under socio-environmental externality production neutrality assumptions

The 2022-2023 move from linear traditional market thinking (TM) to circular traditional market thinking (CTM) under externality production neutrality assumptions can be represented by adjusting Figure 1 to reflect resource use efficiency responsibility leading to the structure in Figure 6 below:

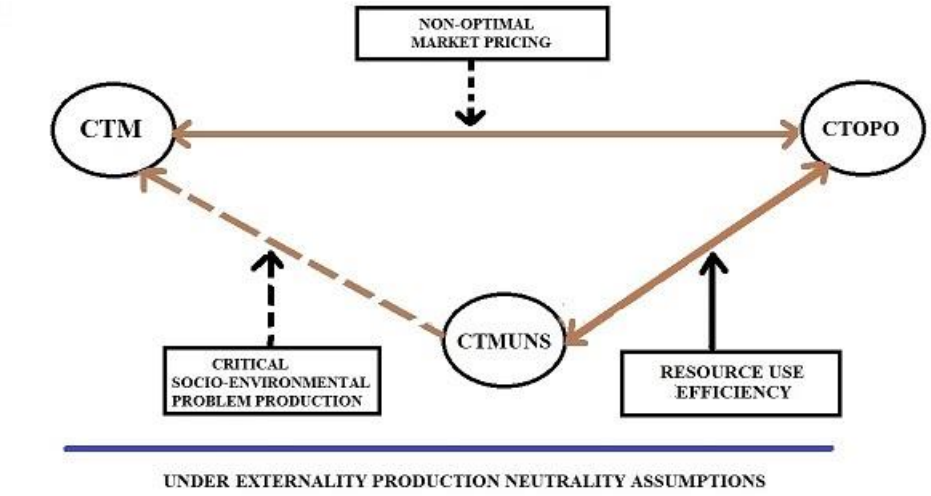

Figure 6 The circular traditional market paradigm loop (CTM) under socio-environmental externality neutrality assumptions

Figure 6 above tells us that circular traditional markets (CTM) addressed resource use efficiency as indicated by the continuous brown arrow from CTOPO to CTMUNS under the assumption that resource use efficient circular market activity do not operate under socio-environmental distorted market prices or do not operate under non-optimal market pricing and they do not lead to critical socio-environmental pollution production problems; and hence they are not subjected to circular market unsustainability conditions (CTMUNS) as indicated by the broken arrows. In other words, Figure 6 above supports the idea that you can achieve resource use efficiency by simply assuming away the same issues embedded in the linear market before that are now embedded in circular traditional market thinking.

The problem:

Resolving the resource use efficiency problem is an economic problem means our attention is on addressing a consequence of the distorted traditional market price problems, not on solving the root cause of the socio-environmental pollution production problem now embedded in circular markets too.

Implication 5:

You cannot expected to solve the socio-environmental crisis by addressing one of the consequences of that crisis, in this case resource use inefficiency, and assuming issues like distorted market prices and socio-environmental pollution production problems away allows to have critical problems, we do not expect, to materialized in front of our eyes.

The structure of the circular traditional market loop under no externality neutrality assumptions

If we free circular traditional market thinking from the externality neutrality assumptions to reflect binding socio-environmental sustainability concerns, when we arrive to the situation summarized in Figure 7 below:

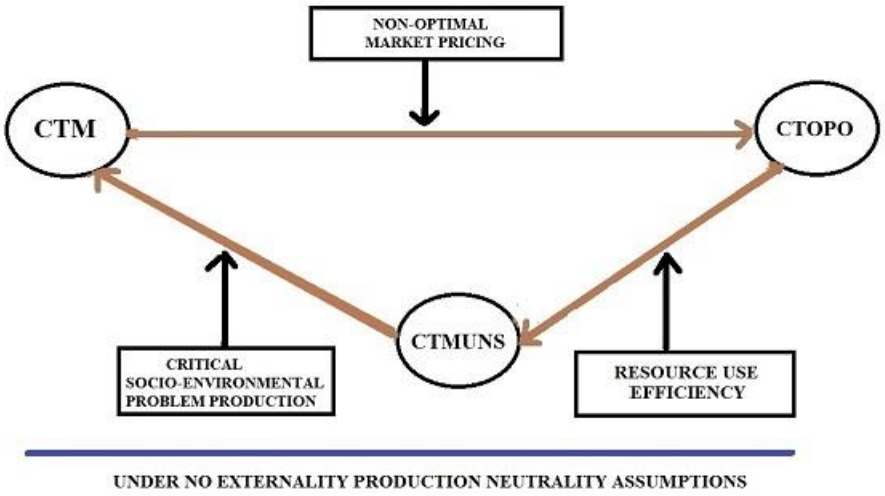

Figure 7 The circular traditional market paradigm loop (CTM) under no socio-environmental externality neutrality assumptions

Figure 7 above simply says that circular traditional markets (CTM) are trying to achieve resource use efficiency while circular markets are working under distorted circular market prices, which drive the resource use inefficiency and critical socio-environmental pollution production problems (SEPOPP) while assuming that they are operating under circular optimal outcomes (CTOPO) and resource use efficiency.

The problem:

Assuming optimal conditions when you have non-optimal conditions should be expected to lead to the worsening of the socio-environmental crisis in front of our eyes while resource use efficiency is accomplished.

Implication 6:

The move to circular traditional markets (CTM) addresses the consequence of non-optimal market pricing in socio-environmental terms, resource use inefficiency, leaving the root cause of the socio-environmental pollution production problem as active as it was under linear traditional markets.

The contradictions embedded in the structure of the circular traditional market loop under no externality neutrality assumptions

The contradictions created by the move from linear market thinking to circular market thinking can be highlighted in simple terms as shown below in Figure 8:

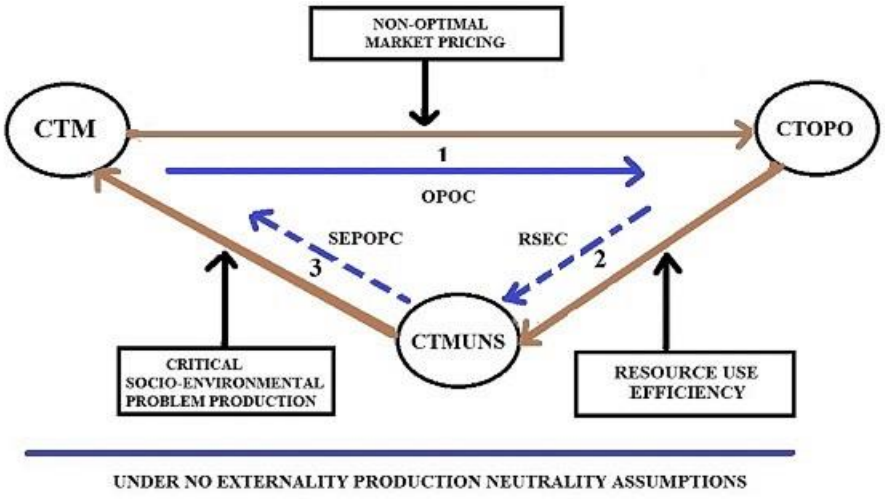

Figure 8 The contradictions embedded in the structure of the circular traditional market paradigm loop (CTM) under no socio=environmental externality neutrality assumptions

The loop represented by the continuous brown arrows CTM-CTOP-CTMUNS-CTM is the world under non-optimal market pricing; and the loop made up by the continuous and the broken blue arrows CTM-CTOP-CTMUNS-CTM is the circular economy world under assumed optimal circular market pricing as indicated by the continuous blue arrow, and hence no impact on circular market unsustainability (CTMUNS) as indicated by the broken blue arrow from CTOPO to CTMUNS; and therefore no impact on socio-environmental critical problem creation or expansion or on the circular traditional market (CTM) as indicated by the broken blue arrow from CTMUNS to CTM, and this situation creates 3 inconsistencies shown in Figure 8 above, i) an optimality contradiction (OPC); ii) a resource efficiency contradiction (RSEC), and iii) a socio-environmental pollution production problem contradiction (SEPOPC).

The problem:

The move from linear traditional market thinking to circular traditional market thinking creates contradictions and critical externality problem solving dilemmas in terms of science based paradigm evolution or a simple paradigm double down, what is it?

Implication 7:

You can expect the focus on resource use efficiency since 2022-2023 to be both resource use efficiency friendly and circular profit making tool and a critical problem solving unfriendly and circular unsustainability accumulation tool at the same time.

The structure of the circular traditional market after removing the distortions under socio-environmental pollution production neutrality assumptions

If we removed the distortions in Figure 8 above, we generate the actual assumed structure of the circular traditional market under resource efficient circular traditional market optimality at work today as described in Figure 9 below:

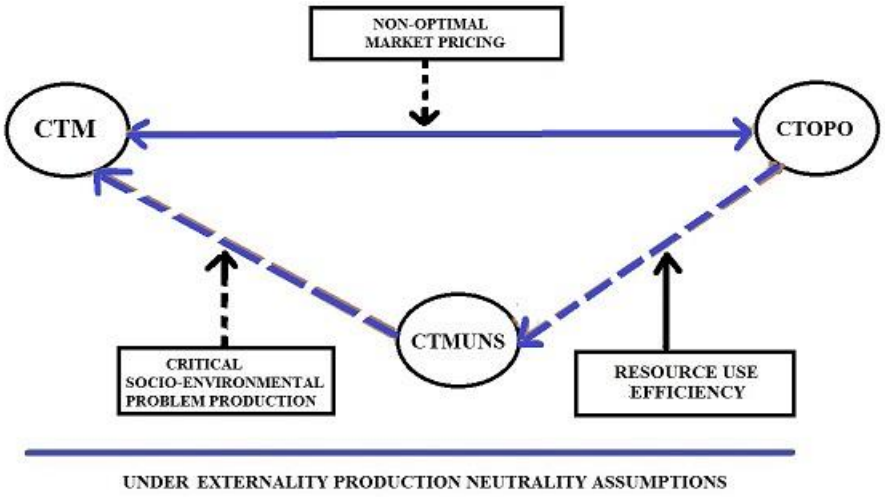

Figure 9 The structure of the circular traditional market paradigm loop (CTM) after removing the contradictions through externality neutrality assumptions

Figure 9 above simply states that resource efficient circular traditional markets (CTM) under optimality assumptions as indicated by the blue arrow from left to right from CTM to CTOPO produce non impacts on circular market unsustainability conditions (CTMUNS), and hence, they do not create socio-environmental pollution production problems as well as they are not affected by market price distortions or non-optimal market pricing as indicated by the broken black arrows; and therefore, they have only positive impacts on the working of the circular market as indicated by the blue arrow from right to left from CTOPO to CTM.

The problem:

Distorted market prices in socio-environmental terms, resource use inefficiencies and critical socio-environmental externality production problems are real, well accepted and documented issues, hence focusing on resource use efficiency as if these issues do not exist creates a critical problem solving dilemma around circular traditional market thinking.

Implication 7:

You cannot expect the focus on resource use efficiency since 2022-2023 to solve the socio-environmental pollution production crisis as it is a form of true sustainability paradigm shift avoidance tool.

The structure of the circular traditional market after acknowledging the distortions under no socio-environmental pollution production neutrality assumptions

If we acknowledge that the distortions in Figure 8 above exist and they cannot be assumed away, we generate the actual real structure of the circular traditional market under contradictions and dilemmas as indicated in Figure 10 below:

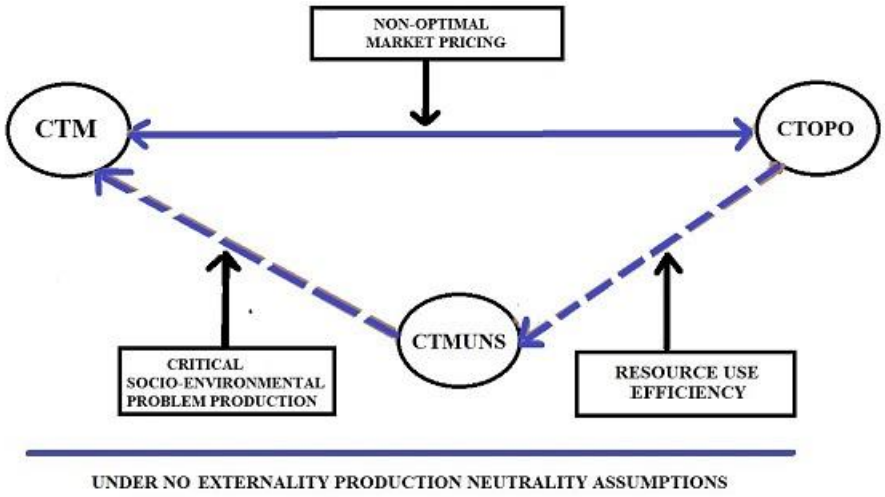

Figure 10 **The structure of the circular traditional market paradigm loop (CTM) after removing the contradictions through no externality production neutrality assumptions**

Figure 10 above simply states that non-optimal pricing in circular markets (CTM) leads to resource use efficient circular optimal conditions (CTOPO), and hence, it does not lead to inefficient use of resources, it does not produce socio-environmental problems, and it does not affect negatively the working of the circular market, a full contradiction.

The problem:

The embedded contradictions in Circular traditional market thinking appear to disappear if we subject linear market thinking to positive paradigm labeling, where circularity labeling make it sound as if the circular markets are socio-environmental pollution production unfriendly whey they are not due to the socio-environmental price distortions embedded in it.

Implication 8:

If we accept that distortions in linear markets such as market price distortions, resource use efficiency distortions, and socio-environmental externality producing distortions are real, then the circular move with no links to solving the distorted market price problem and hence, solving the socio-environmental pollution production problem should be expected to sooner or later backfire, complicating that way the completion of the work started by the Brundtland Commission in 1987 and/or the work of the United Nations Commission on Sustainable development started in 2012, which to be completed require externality cost internalization.

Food for thoughts

1) Is the problem of resource use efficiency a root-cause of socio-environmental sustainability problems? I think No, what do you think?; 2) Are distorted market prices efficient resource allocation tools? I think No, what do you think?; and 3) Is the move from linear to circular market thinking a move outside the Thomas Kuhn's paradigm evolution loop? I think Yes, what do you think?

Conclusions

First, it was mentioned that if we focus on fixing the problem of resource use inefficiency in linear markets we arrive to the structure of circular traditional markets under non-optimal pricing neutrality assumption and socio-environmental pollution production problem neutrality assumptions. Second it was shown that if we remove non-optimal market price neutrality assumptions so that non-optimal pricing is at work in circular markets, then in reality they create resource use efficiency issues and critical socio-environmental problem production issues while expecting resource use efficiency and circular optimal outcomes. Third, if we insert the assumed expectations of circular markets in the no externality production assumption diagram we create 3 inconsistencies: optimality inconsistencies, resource use efficiency inconsistencies, and socio-environmental pollution production problems inconsistencies. Fourth, if we remove the inconsistencies, we develop the assumed circular traditional market structure where resource use efficient circular optimality does not produce externalities and it only positively impact the working of the circular market. Fifth, if we add the inconsistencies to the assumed loop structure of the circular market we can point out the general inconsistency in respect that non-optimal circular market prices there lead to resource use efficiency and to no socio-environmental pollution production problems, a clear distorted market inconsistency.

In general, it was shown in simple terms that going from linear traditional market thinking to circular traditional market thinking is not a critical socio-environmental pollution production problem-solving move as the reason for this move is not to solve the root-cause of the critical socio-environmental pollution production problem affecting linear market thinking, but to address one of the consequences of these market price distortions, namely, resource use inefficiency. It was highlighted that this move creates three types of contradictions, optimality contradictions, resource use efficiency contradictions, and socio-environmental pollution production problem contradictions. It was indicated that when removing the contradictions we have the assumed structure of circular markets and when we leave the contradictions in we have the contradictory nature of placing linear thinking under positive labeling as circularity does not remove the fact that circular markets are still pollution production markets as linear markets were or are.

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