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## **Sustainability thoughts 115: How can the sciences based liberal democracy model and the liberal market model be linked under equality? What are the implications of this?**

By

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## **Abstract**

The nature of the science based liberal democracy model under equality assumptions tells us that individuals and groups of individuals are to receive equal access to government support. While the nature of the liberal market model under equality assumptions says that individuals and groups of individuals are to receive equal access to economic growth. These two theoretical models mentioned above do not work parallel to each other as at the heart of science based liberal democracies under equality there is a liberal market under equality; and therefore, they are linked. And this raises the question, how can the science based liberal democracy model and the liberal market model be linked under equality? What are the implications of this?

## **Key words**

Liberal democracy, Liberal market, sustainability, equality, inequality, trickledown, trickle up, pro-rich support, pro-poor support, pro-rich growth, pro-poor growth, balanced support, unbalanced support, balanced growth, unbalanced growth,

## **Introduction**

**a) The nature of the science based liberal democracy model under equality**

The nature of the science based liberal democracy model under equality tells us that individuals and groups of individuals are to receive equal access to government support, a situation summarized graphically recently (Muñoz 2020a) as indicated in Figure 1 below:

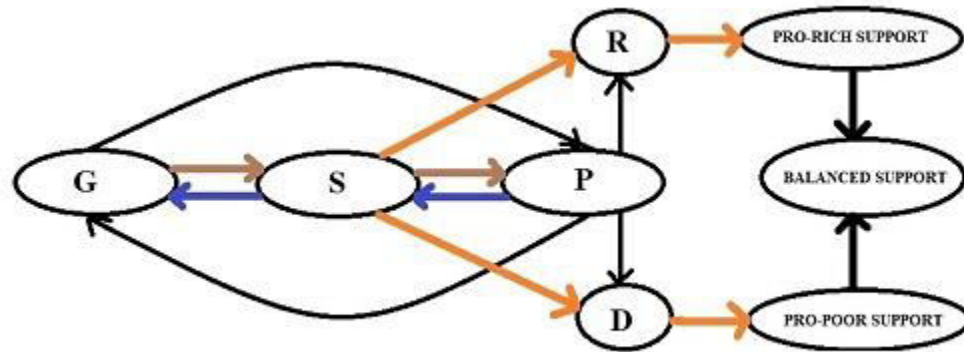


Figure 1 Science based liberal democracy under group support equality

The model in Figure 1 above is the science based liberal democracy model (SLDM) under equality, which tells us the following things: i) that the government (G) is elected by the people (P) as indicated by the black arrows going from P to G and from G to P, and the government (G) uses science (S) to provide equal support to the people (P) by given equal attention at supporting the rich (R) and the poor (D) as indicated by the arrow from S to R and by the arrow from S to D; ii) that any increase in government (G) support accrues equally to the rich (R) and the poor (D) through pro-rich support programs and pro-poor programs respectively, which leads to balanced support development; iii) that as nobody is left behind there is no need for trickle down assumptions in government support programs as each group gets equal support; and iv) that the rich (R) and the poor (D) can both thrive with direct government support, and therefore, under equal support unbalanced support development is not possible. In other words, Figure 1 above summarizes individual and group equality in the electoral and civil responsibilities and obligations of governments under majority rule and equality in access to science based government support for shared support development. It reflects equality in political, moral, legal and participation rights and obligations of individuals; and therefore, Figure 1 above summarizes the main principles related to an ideal democracy that have been pointed out (IPU 1998).

Notice that the structure of the model in Figure 1 above is the structure of a perfect science based liberal democracy model (PSLDM) as it operates under permanent support equality routes integrating the rich (R) and the poor (D) creating this way permanent equality bonds between the rich (R) and the poor (D). Under those equality conditions we should expect support to follow equally the rich/supply side route as pro-rich support and the poor/demand side route as pro-poor support at the same time as everybody benefits leading to balance development (Muñoz 2010), support equality that should be expected to hold stronger as democracies tend towards full morality (Muñoz 2019). In the science based liberal democracy model in Figure 1 above it is not

okay to leave some people or groups behind in terms of support as nobody is left behind. In other words, the democracy model in Figure 1 above has the structure of a true sustainability based model(Muñoz 2013) as it based on full rich-poor support inclusion; and therefore, there are no sustainability gaps(Muñoz 2015) .

**Expectation 1:**

Given Figure 1 above, we should expect that any support response to external threats that affect the survival of the rich(R) and/or the poor(D) in that perfect structure of the science based liberal democracy mode(PSLDM) will be channeled or disbursed equally following those permanent support equality routes increasing that way the strength of the bond between the rich(R) and the poor(D) in the face of treats, even when the treat is a binding threat to the survival of the rich(R) and/or the poor(D): When facing a external threat to its survival, binding or not, both the rich(R) and the poor(D) should be expected to endorse direct trickle downs and direct trickle ups in help to each other following the equality in support principle. In other words, even when under a binding threat to the survival of the rich(R) and/or the poor(P) the flow of support from the science based liberal democracy model should be expected to tend equally to the rich(R) and the poor(D) in timing and in speed of access: the idea of preferential government support does not exist here.

**b) The nature of the liberal market model under equality**

The nature of the liberal market model under equality says that individuals and groups of individuals are to receive equal access to economic growth, a world shared recently graphically(Muñoz 2020b) as detailed in Figure 2 below:

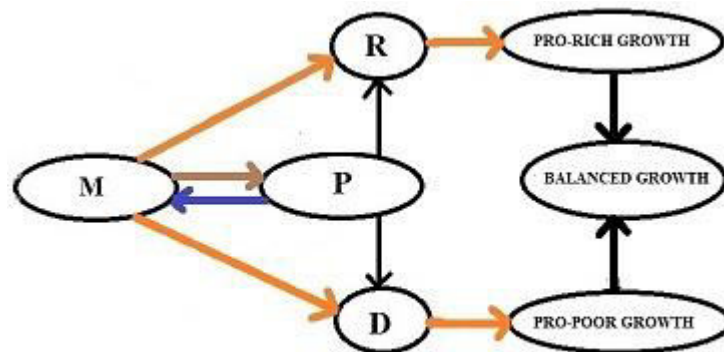


Figure 2 Markets under group growth equality

The model in Figure 2 above is the liberal market model under equality, which indicates the following things: i) that the market(M) provides equal benefits to the people(P) by giving equal attention at supporting the rich(R) and the poor(D) directly as indicated by the arrow from M to R and from M to D; ii) that any increase in market benefits accrues equally to both the rich(R) and the poor(D) through pro-rich growth programs and pro-poor growth programs respectively

that in the end lead to balanced economic development through balanced growth; iii) that there is no need to justify trickle downs or trickle ups as nobody is left behind from directly sharing in the growth as indicated by the arrows from R to pro-rich growth and from D to pro-poor growth; and iv) that both the rich(R) and the poor(D) are expected to thrive with direct benefits from the market(M) and without the need to rely on solely on indirect benefits from the other. Hence, under equal benefit sharing unbalanced economic growth is not possible. In other words, Figure 2 above summarizes individual and group equality in access to economic based government support for shared growth development.

Notice that the structure of the model in Figure 2 above is the structure of a perfect liberal market model(PLMM) as it operates under permanent benefit equality routes integrating the rich(R) and the poor(D) creating this way permanent equality bonds between the rich(R) and the poor(D). Under those equality conditions we should expect market benefits to follow equally the rich/supply side route as pro-rich growth and the poor/demand side route as pro-poor growth following the cone effect as everybody benefits(Muñoz 2009), market benefit equality that should be expected hold stronger as democracies tend towards normal liberal democracies(Muñoz 2017) .

In the market model in Figure 2 above it is not okay to leave some people or groups behind in terms of benefits as nobody is left behind. In other words, the market in Figure 2 above has the structure of a perfect sustainability markets as it is based on full inclusion of economic actors and costs(Muñoz 2016), full rich-poor growth inclusion.

### **Expectation 2:**

Given Figure 2 above, we should expect that any benefit response to external threats that affect the survival of the rich(R) and/or the poor(D) in that structure of the liberal market mode(LMM) will be channeled or disbursed following those permanent benefit equality routes increasing that way the benefit equality bond between the rich and the poor, even when the treat is a binding threat to the survival of the rich(R) and/or the poor: When facing a binding threat to the survival the rich(R) and/or the poor(D) both should be expected to endorse direct trickle downs in benefits to the poor(D) and direct trickle ups in benefits to the rich(R) as that is needed to survive. In other words, even when under a binding threat the flow of benefits from the liberal market model should be expected to tend to the rich(R) and the poor(D) equally in timing and speed of access, the idea of preferential government treatment does not exist here.

If those benefit or support access equality routes would have been reflected in the liberal market model since the time of Adam Smith(Smith 1776), the relevant inequalities associated with this model that scientists and decision-makers are trying to fix since 1987(WCED 1987) to the 2012 shift to green market thinking(UNCSD 2012a: UNCSD 2012b) to the current use of externality management approaches like carbon pricing(GC 2019) would not have existed, and perhaps if that would have been done societies and the environment would be in a better

condition today. Finally, it can be said that the structure in Figure 2 above is consistent with the ideal of economic equity among individuals and groups. The need to move from a world of economic inequity to a world of economic equity has been stressed in the recent past(WB 2006), and today new economic approaches are being thought to move towards a world of environmental and social equity without antagonizing the status quo(OECD 2019). In other words, the perfect growth model in Figure 2 above can help guide development to an environment of inclusive and sustainable growth(OECD 2018) through supporting the setting up of pro-poor growth institutions(WB 2003) to promote pro-poor growth(OECD 2007) and bring that way a more balanced economic development path.

### **c) The need to understand the link between the sciences based liberal democracy and the liberal market world under equality**

These two theoretical models mentioned above do not work parallel to each other as at the heart of science based liberal democracies under equality there is a liberal market under equality; and therefore, they are linked. And this raises the question, how can the nature of the science based liberal democracy model and the nature of the liberal market model be linked under equality? What are the implications of this?

### **Goals of this paper**

a) to show how the science based liberal democracy model and the liberal market model can be linked under equality; and b) To highlight the implications of this in terms of how government action is linked to science based equal economic treatment of individuals and groups of individuals.

### **Methodology**

i) the terminology used in this paper is shared; ii) some operational concepts are given; iii) the science based liberal democracy model and the liberal market model are linked under equality; iv) the implications of living in a economic science based liberal democracy under equality are stressed; and v) some food for thoughts and conclusions are provided.

### **Terminology**

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PSLDM = perfect science based liberal democracy

S = science

PESLDM = perfect economic science based liberal democracy    P = people

SM = economic science based market                      R = the rich/supply side of the market

D = the poor/the demand side of the market    LDM = liberal democracy model

G = elected government one person-one vote    M = Liberal market

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## **Operational concepts**

### **a) Liberal market**

- 1) **Equality**, *the idea that all members of a system receive the same treatment.*
- 2) **Inequality**, *the idea that only some members of a system receive better treatment.*
- 3) **The liberal market**, *the pro-growth market.*
- 4) **Sustainability**, *the idea that equality in treatment leads to full responsibility.*
- 5) **Trickledown**, *the idea that pro-rich growth will one day indirectly benefit the poor.*
- 6) **Direct trickledown**, *the help that reach the poor directly.*
- 7) **Extreme intervention based direct trickle down**, *the government help that reach the poor directly during an extreme event.*
- 8) **Trickle up**, *the government help that reach the rich directly during an extreme event.*
- 9) **Indirect trickle up**, *the idea that direct trickledown will benefit pro-rich growth.*
- 10) **Pro-rich growth**, *the type of development targeted to benefits the rich.*
- 11) **Pro-poor growth**, *the type of development targeted to benefit the poor.*
- 12) **Balanced growth**, *the type of development that brings benefits to both the rich and the poor at the same time.*
- 13) **Unbalanced growth**, *the type of development that brings benefits to only the rich or to only the poor.*
- 14) **Externality neutrality assumption illusion**, *the idea that relevant inequalities or market distortions can be assumed away to create perfect conditions.*

**15) No externality neutrality assumption**, *the idea that there are not irrelevant inequalities or market distortions in reality so all of them need to be accounted for.*

**b) Liberal democracy**

**1) Equality**, *the idea that all members of a system receive the same support.*

**2) Inequality**, *the idea that only some members of a system receive better support.*

**3) The liberal democracy model**, *the one based on majority rule, one person, one vote.*

**4) Sustainability**, *the idea that equality in support leads to full responsibility.*

**5) Trickle down**, *the idea that pro-rich government support will one day indirectly benefit the poor.*

**6) Direct trickle down**, *the support that reach the poor directly.*

**7) Extreme intervention based direct trickle down**, *the government support that reach the poor directly during an extreme event.*

**8) Trickle up**, *the government support that reach the rich directly during an extreme event.*

**9) Indirect trickle up**, *the idea that direct trickle down will benefit pro-rich support.*

**10) Pro-rich support**, *the type of support targeted to benefits the rich.*

**11) Pro-poor support**, *the type of support targeted to benefit the poor.*

**12) Balanced support**, *the type of support that brings benefits to both the rich and the poor at the same time.*

**13) Unbalanced support**, *the type of support that brings benefits to only the rich or to only the poor.*

**14) Externality neutrality assumption illusion**, *the idea that relevant inequalities or liberal democracy distortions can be assumed away to create perfect conditions.*

**15) No externality neutrality assumption**, *the idea that there are not irrelevant inequalities or liberal democracy distortions in reality so all of them need to be accounted for.*

**Linking the science based liberal democracy model and the liberal market world under equality**

Notice that if the type of science(S) based model of the liberal democracy structure under equality in Figure 1 above is based on economic science or the science of liberal markets(M) under equality summarized in Figure 2 above that means pro-rich support leads to pro-rich growth and that pro-poor support leads to pro-poor growth, which leads to balanced growth; and this in turn leads to no need for pro-trickledown and pro-trickle up expectations as everyone shares in the growth directly under balanced growth, so we can insert the structure in Figure 2 into Figure 1 as indicated in Figure 3 below:

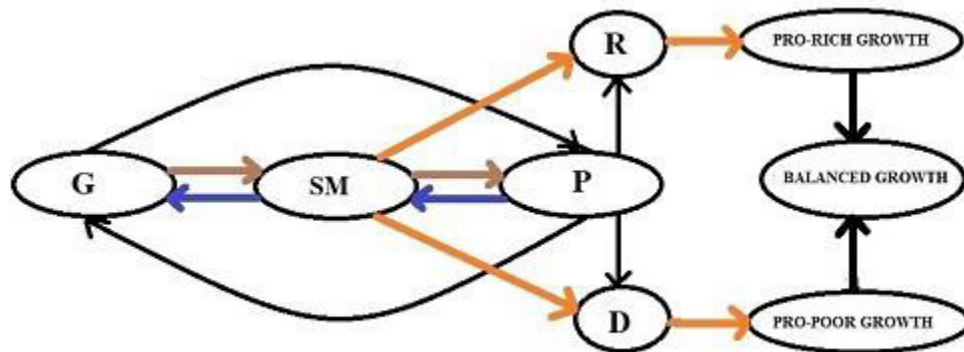


Figure 3 Linking science based democracy and liberal markets(SM) under equality

The model in Figure 3 above is the economic science based liberal democracy model(ESLDM) under equality, which tells us the following things: i) that the government(G) is elected by the people(P) as indicated by the black arrows going from P to G and from G to P, and the government(G) uses economic science(SM) to provide equal support to the people(P) by given equal attention at supporting the rich(R) and the poor(D) as indicated by the arrow from S to R and by the arrow from S to D; ii) that any increase in government(G) support or market benefits accrues equally to the rich(R) and the poor(D) through pro-rich benefit programs and pro-poor benefit programs respectively, which leads to balanced economic development; iii) that as nobody is left behind there is no need for trickle down assumptions in government benefit programs as each group gets equal benefit; and iv) that the rich(R) and the poor(D) can both thrive with direct government benefits, and therefore, under equal benefits unbalanced economic development is not possible. In other words, Figure 3 above summarizes individual and group equality in the electoral and civil responsibilities and obligations of governments under majority rule and equality in access to economic science based government support for shared growth development. Hence, it reflects equality in economic, political, moral, legal, and participation rights and obligations of individuals.

Notice that the structure of the model in Figure 3 above is the structure of a perfect economic science based liberal democracy model(PESLDM) as it operates under permanent benefit equality routes integrating the rich(R) and the poor(D) creating this way permanent equality bonds between the rich(R) and the poor(D). Under those equality conditions we should expect benefits from growth to follow equally the rich/supply side route as pro-rich growth and

the poor/demand side route as pro-poor growth at the same time, benefit equality that should be expected to hold stronger as democracies tend towards full morality. In the economic science based democracy model in Figure 3 above it is not okay to leave some people or groups behind in terms of growth benefits as nobody is left behind. In other words, the democracy in Figure 3 above has the structure of a sustainability based liberal democracy as it is based on full inclusion, full rich-poor support inclusion.

### **Expectation 3:**

Given Figure 3 above, we should expect that any support response to external threats that affect the survival of the rich(R) and/or the poor(D) in that perfect structure of the economic science based liberal democracy mode(PESLDM) will be channeled or disbursed equally following those permanent growth benefit equality routes increasing that way the strength of the bond between the rich(R) and the poor(D) in the face of treats, even when the treat is a binding threat to the survival of the rich(R) and/or the poor(D): When facing a external threat to its survival, binding or not, both the rich(R) and the poor(D) should be expected to endorse direct trickle downs and direct trickle ups in help to each other following the equality in benefit principle. In other words, even when under a binding threat to the survival of the rich(R) and/or the poor(P) the flow of benefits from the science based liberal democracy model should be expected to tend equally to the rich(R) and the poor(D) in timing and in speed of access: the idea of preferential government benefit does not exist here.

### **Implications**

i)The perfect economic science based liberal democracy model(PESLDM) detailed in Figure 3 above has the opposite structure as that of the economic science based liberal democracy model adopted since Adam Smith times, a model thriving under perfect equality, not perfect inequality. And hence, the only way Adam Smith could have stated a perfect traditional market model as he did in 1776 outside equality conditions was by assuming a world under a total inequality neutrality assumption; ii) regardless of whether the threat of external threats to the well-being of the rich and/or the wellbeing of the poor is binding or not, the rich and the poor will be at equal footing under any benefit response program aimed at counteracting the economic impact of that external treat within this perfect economic science based liberal democracy model; and iii) therefore, science based economic and democratic equity is at the heart of the perfect economic science based liberal democracy model shared above.

### **Food for thoughts**

i) Can preferential treatment exist under perfect science based liberal democracies? I think no, what do you think?; ii) Do imperfect economic science based liberal democracies tend towards inequality exploitation? I think yes, what do you think?; iii) Can capitalism a la Adam Smith be considered irresponsible in sustainability terms? I think yes, what do you think?; and iv) Should we expect unequal distribution of stimulus package benefits against extreme external threats among affected groups regardless of need under an imperfect science based liberal democracy? I think yes, what do you think?

## Conclusions

First, it was pointed out how the science based liberal democracy model can be linked to the current liberal market model under equality to arrive to the perfect economic science based liberal democracy model. Second, it was stressed how elected governments can use this economic science based liberal democracy model to create bonds under group benefit equalities and benefit partnerships. Third, it was highlighted that the only way an equality model by design can be made to be an imperfect model is by making up inequality neutrality assumptions. Finally, it was highlighted when facing external threats the economic science based liberal democracy model under equality should be expected to have the rich and the poor under equal footing when implementing even extreme benefit responses to binding threats to the wellbeing of the rich and/or the poor.

## References

Government of Canada(GC), 2019. [\*How we're putting a price on carbon pollution\*](#), Ottawa, ON, Canada.

Inter-Parliamentary Union(IPU), 1998. [\*DEMOCRACY: ITS PRINCIPLES AND ACHIEVEMENT\*](#), Geneva, Switzerland.

Muñoz, Lucio, 2009. [\*How Do Agricultural Development Benefits Actually Spread: Is it the Trickle Down Effect or the Embudo Effect?\*](#), In: *Environment and Society, Special Edition, No. 372, January 8, ECOPORTAL, Buenos Aires, Argentina.*

Muñoz, Lucio, 2010. [\*Where Should Donors Place Their Monetary and Trade Incentives to Encourage Developing Countries to Implement Balanced Pro-Rich/Pro-Poor Development Programs?\*](#), *Journal of Sustainability*, Issue 3, Number 2(Fall), Rio Rancho, New Mexico USA.

Muñoz, Lucio, 2013. [\*Utilitarianism, Raw Liberalism, Moral Liberalism, and True Sustainability: Basic Paradigm Foundations, Changing Assumptions, and the Evolution of\*](#)

[Development Paradigms](#), In: *The Mother Pelican Journal*, Vol. 9, No. 1, January, Ed. Luis Gutierrez, PhD, USA.

Muñoz, Lucio, 2015. [Moral and Practical Sustainability Gaps: Implications for the Current Liberal Development Model](#), *Weber Sociology & Anthropology* (ISSN:2449-1632), Vol. 1 (4) 2015, Article ID wsa\_149, 317-320

Muñoz, Lucio, 2016. [Beyond Green Market Thinking: What would be the Structure of the Perfect Sustainability Market?](#), In: *International Journal of Science Social Studies Humanities and Management (IJSSSHM)*, Vol. 2, No. 5, May, Ed. Dr. Maya Pant, India.

Muñoz, Lucio, 2017. [Majority Rule Based True Democracy Under Complacency Theory: Pointing Out The Structure of Normal and of Extreme Democratic Outcomes Analytically and Graphically](#), *Boletín CEBEM-REDESMA*, Año 10, No. 8, October, La Paz, Bolivia.

Muñoz, Lucio, 2019. [Moral and Amoral Liberal Democracies: How Targeted Chaos Can Affect the Democratic Process?](#), In: *International Journal of Management Studies and Social Science Research(IJMSSSR)*, Volume 1, Issue 2, March-April, Ed. Dr. Vishal Muvel, India.

Muñoz, Lucio, 2020a . [Sustainability thoughts 113: How can the hidden unequal nature of the liberal democracy model be detailed step by step?](#), *Boletín CEBEM-REDESMA*, Año 14, No.5, May, La Paz, Bolivia.

Muñoz, Lucio, 2020b. [Sustainability thoughts 112: How can the hidden unequal nature of the liberal market model be detailed step by step?](#) , *Boletín CEBEM-REDESMA*, Año 14, No.4, April, La Paz, Bolivia.

Organisation for Economic Cooperation and Development(OECD), 2007. [Promoting Pro-Poor Growth POLICY GUIDANCE FOR DONORS, DAC Guidelines and Reference Series](#), Paris, France.

Organisation for Economic Cooperation and Development(OECD), 2018. [THE FRAMEWORK FOR POLICY ACTION ON INCLUSIVE GROWTH](#), Meeting of the OECD Council at Ministerial Level, May 30-31 Paris, France.

Organisation for Economic Cooperation and Development(OECD), 2019. [BEYOND GROWTH: TOWARDS A NEW ECONOMIC APPROACH: Report of the Secretary General's Advisory Group on a New Growth Narrative](#), September 12, Paris, France.

Smith, Adam, 1776. *The Wealth of Nations*, W. Strahan and T. Cadell, London, UK.

United Nations Conference on Sustainable Development(UNCSD), 2012a. [Rio+20 Concludes with Big Package of Commitments for Action and Agreement by World Leaders on Path for a Sustainable Future](#), Press Release, June 20-22, New York, NY, USA.

United Nations Conference on Sustainable Development(UNCSD), 2012b. [\*The Future We Want\*](#), June 20-22, New York, NY, USA.

World Bank(WB), 2003. [\*Toward Pro-Poor Policies Aid, Institutions, and Globalization\*](#), 5<sup>th</sup> Annual World Bank Conference on Development Economics Europe: Economic Integration and Social Responsibility, Paris, France, May 15–16, Washington DC, USA.

World Bank(WB), 2006. [\*World Development Report: Equity and Development\*](#), Co-publication with Oxford University Press, Washington, DC, USA.

World Commission on Environment and Development(WCED), 1987. *Our Common Future*, Oxford University Press, London, UK.

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