1: Introduction

This study aims to provide some empirical evidence of the processes and concerns related to teaching financial literacy to teachers so that they can then teach students.[1] It documents a workshop at a UNESCO conference on sustainability held in Karlsruhe, 25-28 September 2013, the concept of which gave the context for a workshop by Dr. Christopher Houghton Budd entitled: *Associative Economics – The search for a just price in today's world*.

Deriving initially from the work of Rudolf Steiner,[2] associative economics is essentially about understanding economic life as a field in which all human beings are free to act, but need also to think of their effect on economic life as a whole, not simply focus on their self-interest. In the event, this overall topic and the contribution of Rudolf Steiner to economics hardly figured.[3] The role of price, however, was discussed directly at several moments and was the issue on which much of the discussion turned. Indeed, all entries in accounting, which was the 'meat' of the workshop, represent prices. The question is whether they are true or false prices, a distinction that depends on whether money is understood and treated as a thing unto itself or as a proxy for economic affairs.[4]

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[1] In the case of the teachers who took part most teach 15-18 year olds, two teach 19-23 year olds. An important consideration is whether one teaches finance in the abstract or as part of a vocational training (see, for example, DUOC university in Chile). Age appropriateness is also important (see *Age Appropriateness*).

[2] See his inaugural series of lectures, *Economics – The world as one economy.* Search *aeBookstore.com.*

[3] For a full treatment of this, see *Finance at the Threshold – rethinking the real and financial economies*, Christopher Houghton Budd, Gower 2011.

[4] Central to this and discussed in the workshop, but not in the detail it merits, is the thought that, strictly speaking, markets only comprise goods, not rights, and that only goods can have prices. Rights ought not to be subject to a consideration, for example, as when a farmer transferred his farm to his son through the bloodline, i.e. before the introduction of modern wealth distribution by taxation. The four main things that are treated as goods but should not be because they are in reality matters of right are land, labour, capital and money.

The conference was keynoted by Prof. Dr. Franz-Joseph Radermacher, who placed much emphasis on sustainability and who was very critical of ‘casino capitalism’. His comments and indeed his sense of injustice, illustrated well the essential problem we face, namely that modern economics has taken a path that makes it reliant upon equilibrium theory and mathematics, in terms of which money is also seen as a thing in itself, rather than as a proxy. The result is that money when regarded as a commodity becomes an unfair competitor and thus falsifies all prices. Prices are arguably *the* metric on sustainability, as suggested in monetary policy by the concept of price stability.[5] But for this they need to be true, economically true, which means that money needs to be re-embedded. We have to understand the true nature of money. Not in order to go back to pre-monetised conditions, but forwards to an economic life in which human beings act in freedom and responsibility, and thus also sustainably. Conversely stated, unsustainability is the result of freedom *without* responsibility. Understanding money as a proxy is a tall order, however, because it requires us to understand it as a means of perceiving economic life, not as a means of exploiting it for one’s own gain.

Some preliminaries

The workshop was conceived in terms of a particular methodology aimed at maximising objectivity, for which the following notes outline some of the essential, albeit here incomplete, preliminary concerns and considerations. The process had five stages:

1) Presentation of material, with a strong accent on visuals. The role of images in economics is very important because they work at a universal level and are beyond capture by any particular culture. They especially allow one to transcend the subtle form of ‘russification’ that today’s

[5] In truth, a concept that merits careful investigation, but here is not the place for that.

carefully contrived, predominantly Anglo-Saxon economics all too easily represents.[6]

2) Assimilation of material through dialogue and shared elaboration by way of corroboration of the material by teachers out of their own experience and examples. (This 'tested' the objectivity of the material; the possibility of transmitting it independently of any particular teacher.)

3) Preparation of a presentation to a third party audience (excluding the presenter and the participants) of what had been learned with the presenter entirely absent. This was also an opportunity for collaborative, collective activity.

4) Presentation to an external panel of experts. (In this case, the rest of the conference participants – all knowledgeable teachers, versed in how to teach, albeit not necessarily the subject matter concerned.)

5) Evaluation by (a) teaching professionals as to teachability and (b) topic professionals as to content.

The presentation took the form of a brief play, which was filmed, so that topic evaluation is covered by the presenter's assessment of the video (see *21: Presenter's Evaluation of Play*). The pedagogic evaluation is in the form of brief, spontaneous commentaries by the workshop participants (see *22: Teachers' Feedback*). In these regards, the study does not pretend to be more than 'light', serving mainly as an indication of what is possible. The participants also did not know they would be the subject of study until the end – an aspect of the workshop that hopefully contributed to its spontaneity and authenticity.

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[6] The illustrations are from blackboard drawings and flip chart sketches made during the workshop, with some added from other similar workshops.

How is financial literacy conceived?

There are many ways to conceive finance and therefore to teach, impart or cultivate financial literacy. In this case, the essence of financial literacy is understood to be represented by double-entry bookkeeping. Accordingly, the material presented endeavoured to show the place of double-entry bookkeeping in human history, the foundation in terms of which all economic activity is conducted, governed and evaluated. In fact, conscious economic life can be seen as an elaboration of double-entry bookkeeping. Conversely, double-entry bookkeeping is the distillation of economic conduct.

How is financial literacy taught?

The question is how to convey or impart this essence to teachers so that they can in turn impart it to their students. The 'answer' given here is by refining and contextualising the evolution of double-entry bookkeeping as precisely as possible, so that it can be readily grasped and elaborated in terms of the teacher's or student's own experience.

Evidence and evaluation

Evidencing and evaluating the teaching of financial literacy, indeed financial literacy itself, are related topics. The basic concept here is that the ultimate test is whether the students can repeat back to the presenter or, better put, reiterate the concept and its significance to a third party. Insofar as financial literacy equates with understanding double-entry bookkeeping, it also turns on the ability to explain the latter's principles and to demonstrate its technique.

Ideologically neutral

From the point of view of a worldwide project, it is important to note that double-entry bookkeeping is ideologically neutral. That means it crosses all political and cultural boundaries. This has been verified by the presenter's experience in many countries and cultures, although not yet directly in Asia, Arabia or Africa.

Age appropriateness

For the purposes of this study, human beings are assumed to be 'in development', so that (a) a student is not a constant and (b) the way financial literacy can be taught has to be age appropriate. Age appropriateness includes the possibility that modern adolescence recapitulates or reflects adolescence in the evolution of capitalism from 1776 until now – the precocity of 'me' becoming superseded by the maturity of 'I'.

Double-entry bookkeeping

The basic thrust of the workshop process (but also of life itself) was to begin in double-entry bookkeeping then through accounting to track events out into economic life as a whole, using financial planning as an orderer of financial behaviour, so that this behaviour becomes reflected in and reinforced through policy and followed by markets. Key is to understand the pristine or *Ur* moment of accounting, when the liability of 'Own Capital' is matched by the asset of 'Cash'.[7]

Double-entry bookkeeping should not only be understood in terms of its techniques and to the level of proficient bookkeeping (that is, capable of external audit confirmation), it should also be understood in terms of why one does it, why it exists, what its effect is on the user and what are its wider social impacts. (For example, the T-account can be seen as an image of upright youth; likewise 'balance' can be taken as a metaphor for a life well lived.)

[7] Accounting terms are explained later, see Chapters 15-19.