

Design of the economy of a worker cooperatives society: economic democracy and the organisation of cooperatives

Introduction

This chapter presents the organisation of the economy of a worker cooperatives society. This does not take up very much space in this book. Division 1 presents the organisation in itself – further detailing its main elements set out in 1D1. Division 2 sums up the direct support of cooperatives by state institutions and expands on the macroeconomic connections between households and cooperatives. Throughout the text I sparingly make comparisons with capitalism. Division 3 reflects on the interactions between cooperatives and households via markets, and contrasts these interactions with some notions of a socialist alternative.

Regarding the style of especially Division 1, it is recalled from the General Introduction that in face of a transition this text (and others of Part One) has the character of points that are preliminary to transitional legislation, and that can fairly easily be put into the legislative format as customary in specific countries. In other words, the text has the character of a series of brief ‘explanatory memorandums’ that in many countries accompany legislative texts.

Terminology. In what follows (chapters 2 and 3) I have evaded using the term *employment* for the Design, so as to, implicitly, designate that there is no social class that exploits (i.e. employs) another by appropriating the latter’s surplus product. For the same reason I avoided the term ‘profit’, to the extent that it has a similar connotation, more specifically in the sense of taking profit.

I also avoid the term *enterprise* (as well as ‘firm’) because of its capitalist connotation; for its Design counterpart I use the term *cooperative*.

When I use the term *economy* or ‘economic’, this does not imply that the economy is non-political (as some mainstream economists would hold). The Design’s economy is as political as the capitalist economy is (regarding e.g. property rights, decision-making at the point of production and the distribution of value-added). The Design’s economy refers to the sphere where the cooperatives’ organisation predominantly prevails (inasmuch as in the capit-

alist economy, capitalist enterprises predominantly prevail). (See further the Introduction to chapter 3.)

Below I have maintained the term *surplus* because in any society, producers must yield a surplus beyond what they consume (such as for investment, or for those that cannot produce, or that because of age, or other reasons, are exempted from producing). I use the term '*dividend*' for any part of the surplus that is distributed to workers. For principal reasons I have maintained the term '*interest*' so as to emphasise that in any society, 'roundabout' production, or investment, has a price (investment must in some way be weighed against non-investment). Finally, I have maintained the term '*wage*' for the agreed distributed income that workers can always count on (as against dividends). I use this term for lack of any better one that is not artificial. (The term 'income' tout court will not do, because dividends are also income.)¹ But in case, for some, the term 'wage' would immediately be associated with 'capitalist wage labour' I am happy to replace it with 'advanced income'.

When commenting on capitalist enterprises a distinction is made between 'the capitalist stock corporation' (in brief corporation) as owned by shareholders, and the 'capitalist firm' (in brief firm) as owned by an individual or by partners. The corporation's shareholders are limitedly liable, whereas the owner(s) of a firm are fully liable. (In most countries corporations and firms are also taxed differently.)

Abbreviations and cross-references. I adopt four frequently used abbreviations. On their first use these are underlined and explained; they are also listed at the end of the book. The sections below have numbered subsections (in fact paragraphs) which should facilitate brief cross-references throughout this chapter and the rest of the book. Each section starts with a subsection numbered zero (e.g. 2§2.0) which treats the core of the full section (2§1 has no subsections).

For further information on cross-references between chapters see the General Introduction pp. 7–8.

1 Schweickart (2011), for example, explicitly turns away from the term 'wage' (fine), but sees no harm in using instead the term 'distributed profits' as 'the' full workers' remuneration. Apart from my objection to the term 'profits' because of its exploitative connotation (see the main text above) this is somewhat awkward because profits should then be distributed before they are realised (assuming that workers do not have to 'advance' their labour).

Division 1. Organisation of the cooperatives economy

2§1 *General characterisation of the cooperatives economy*

2§1.0. Labour is the sole producer of value-added – this is so for the cooperatives mode of production, outlined below, as much as for the capitalist mode of production.² The main economic difference between the two modes of production is that in capitalism the members of the capitalist class appropriate in the form of profit the surplus part of value-added, whereas in the cooperatives mode of production the distributable surplus accrues to the labour that produces it. Because of the capitalist appropriation referred to, the relation between the capitalist and labour class is exploitative.

In the cooperatives economy designed below, workers constitute the single economic class. They do not own the means of production (as in capitalism the capitalist class members do); instead workers are the usufructuaries of the means of production. (Usufruct combines use right and the fruits right – explained in 1§1, and further explained in 2§5.0.) In contrast with state socialism, the state does not own the economy's means of production (except for rented out agricultural land). Instead the cooperative as legal entity holds a restricted ownership of the means of production. Whereas, as explained later on, workers govern the cooperatives, they are as indicated no more, and no less, than the usufructuaries of the cooperative's restricted ownership: they are the sole beneficiaries of the cooperative's distributable income; that is, of wages (far less skewedly distributed than in capitalism) as well as dividends (that in capitalism are received by the capital owners).

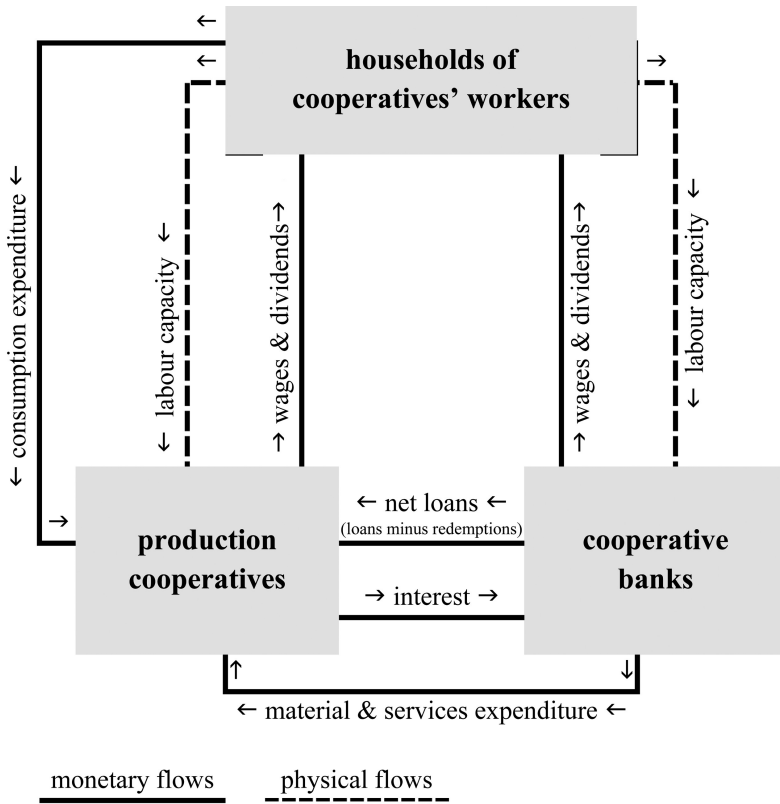
Although cooperatives and households are separate entities, there is (as against capitalism) no antagonistic separation between workers' households and enterprises.³ *Scheme 2.1* shows the main macroeconomic connections between households and cooperatives.

The complete macroeconomic connections between households and cooperatives – as including saving – will be presented in 2§22.

2 For capitalism it is shown in Reuten 2019 (pp. 65–71) that labour is the sole producer of value-added, and how the surplus part of value-added is appropriated by the capitalist class (<https://brill.com/view/title/38778> open access).

3 On the antagonistic separation within capitalism, see Reuten 2019 pp. 33–4.

SCHEME 2.1 *Macroeconomic connections between households and cooperatives: annual flows (abstracting from saving)*



Note: 'Net loans' (stream from cooperative banks to production cooperatives) is the flow of loans minus the flow of redeemed loans.

2§2 *Types of worker cooperatives*

2§2.0. There are two types of worker cooperatives in this economy: production worker cooperatives (**PWC**) and cooperative banks (**COB**). ('Production' is used in the wide sense, as including retail and other services. The term 'cooperative(s)' without specification refers to banking and non-banking cooperatives.) For their inputs and outputs cooperatives operate on markets, the measure of value being monetary.

2§2.1. Households and cooperatives, and cooperatives mutually, are interconnected via markets – except for health and education provisions and for real estate that are organised via state institutions (on real estate see also 2§15). COBs provide investment loans to PWCs (see 2§6). With the exceptions mentioned, the organisation of all types of production or services can take the form

of a cooperative (similarly to those that in capitalism are organised in firms, corporations, partnerships and foundations).

2§2.2. Although apart from state institutions, cooperatives are the predominant economic organisation entities, no one is forced to become a member of a cooperative. Individuals are free to run by themselves a registered ‘Single person enterprise’. However, ‘hiring a worker’ is not allowed. In the economic domain the only possible legal form for a multi-workers entity is that of a cooperative. The reason is the avoidance of exploitative relations, as in capitalist enterprise–employee relations.⁴ A person is not allowed to run such an enterprise and at the same time be a worker in a cooperative or in the public sector (the public sector is introduced in chapter 3).

2§2.3. Individual services for households shall be provided by cooperatives only.⁵

2§2.4. Next to 2§2.2 there are structural or temporary exceptions to the uniqueness of the cooperative organisation of production – see chapter 3, divisions 7 and 9. These regard mainly the fully state-financed health and education sectors, whose services are provided free of charge.

2§3 *The cooperative as legal entity*

2§3.0. The ‘Design cooperative’ is a legal entity, the structure of which is based on that of the association – the association being its highest governing body. Only the workers of the cooperative can be members.⁶ A person can become a member after a successful application for a vacancy. The membership is not bound to refundable or non-refundable dues. The cooperative as legal entity is the owner of the cooperative’s assets, though this is a restricted ownership: once founded, a cooperative is not allowed to be sold, nor is it allowed to convert its juridical status into another juridical form.⁷ The cooperative’s members have no direct or indirect ownership in the cooperative and its assets – notably they own no alienable or non-alienable shares in the cooperative. However, workers are the sole beneficiaries of the cooperatives’ distributable income: collectively they are the cooperative’s usufructuary.

4 I object to Schweickart’s idea, of allowing for a labour employing capitalist sector in a ‘worker self-management’ society (2011 edition, pp. 77–80; the 2002 edition does not mention this).

5 Such services may regard, for example, childcare, cleaning or repair. It will be seen that cooperatives shall pay their workers at least the minimum wage. As a minimum wage does not apply for single person enterprises, rule 2§2.3 implies that for the relevant services households pay at least the minimum wage.

6 The association is similar to a membership association as they exist in most capitalist countries; however, the Design’s cooperatives associations pay no membership fee.

7 Thus, of the three main elements that define the ‘property right’ of an entity (use right, right to its fruits, and the right to its alienation), the cooperative holds the first two only.

Addendum 2§3. One similarity between a capitalist 'foundation' and a 'Design worker cooperative' is that these entities have no owners. One relevant distinction is that the cooperative has members, whereas a foundation has no members.

Because a Design cooperative is not allowed to be sold, it holds a restricted ownership in comparison with a capitalist stock corporation, which holds full ownership of the entity. Because cooperatives' workers own no shares in the cooperative, and because in the economic domain a cooperative is the only possible multi-workers legal entity (2§2.2) there is no shares market.

2§3.1. The prohibition of the selling of the cooperative includes the prohibition of the selling of parts of it such that the income from it accrues as income to the workers. These prohibitions secure the continuity of the cooperative. Workers receive the distributable fruits of the cooperative during their working life. On the workers' retirement the acquirement of the fruits succeeds to the next generation of workers.

2§3.2. When for some reason a cooperative is no longer able to stand on its own, it is allowed to merge with another cooperative (take-overs fall under the selling prohibition).

2§3.3. Cooperatives are organised in no more than a single location (which may consist of several buildings or plants on that location). The main reason for this is that a multitude of locations would dilute the power of the cooperative's council (see 2§5). The combination with the previous point may mean that merged cooperatives have to move to a larger location. (See also 2§14 and 2§15.) Note that the single location rule is not incompatible with large-scale production; depending on the country, a single cooperative might provide jobs to several tens of thousands of workers in a location covering several hundred thousand square metres.

2§3.4. Workers can become members of the cooperative's association after a successful application for a vacancy. The membership shall not require any funds of the worker nor a membership fee. The cooperative's council (see 2§5) may decide to grant memberships after a probation period of maximum two years. Applications are open to all for the vacancy qualified persons, without ethnic, gender, social, political or religious discrimination. (See 2§12.2 on the remuneration of new workers and members).

2§4 *Foundation of cooperatives*

2§4.0. Cooperatives can be founded at all times by a group of workers. The foundation requires no funds of the workers, nor a membership fee. Cooperatives are not allowed to found other cooperatives.

2§4.1. The foundation of a COB is initiated by a ‘cooperative bank plan’ as drawn up by a group of workers. The foundation of a COB can be assisted by the state’s *Guardian Bank* (ch. 3, 3§14). On the foundation see further Appendix 2B. When in case of a COB’s bankruptcy there would be insufficient banking capacity for investment loans in a region, the Guardian Bank temporarily stands in until a new COB has been established.

2§4.2. The foundation of a PWC is initiated by the drawing up of a ‘cooperative plan’ on the basis of which a COB may grant investment loans to the cooperative in formation – see 2§6.0 on investment loans. (Note that in capitalism banks might similarly provide credit based merely on a ‘business plan’.) Should no COB be willing to grant credit based on the plan, the initiators can apply with the state’s *Investment-credit Guarantee Fund* for the early security of the cooperative (ch. 3, 3§15).

2§5 *Governance of cooperatives*

2§5.0. The highest governing body of a cooperative is its council. The council is formally constituted by the cooperative’s association of workers – and exclusively so. Council members have voting rights according to their appointment as a percentage of a full-time one. The council elects from its ranks a management – the management being removable. The council decides on the competences of the management.

Addendum 2§5. Comparison of capitalist and cooperatives (non-)ownership relations.

- As mentioned, because a Design cooperative is not allowed to be sold, it holds a *restricted ownership* in comparison with a capitalist stock corporation, which holds full ownership of the entity (addendum 2§3).
- Comparing the highest governing bodies of the two legal entities, the membership of the cooperative council derives from a successful application for a vacancy – the membership not being bound to refundable or non-refundable dues. *Members do not own the cooperative*, instead members collectively are the usufructuaries of the cooperative (2§3.0). The usufruct cannot be alienated, neither collectively nor individually.
- In a capitalist stock corporation, the general body of shareholders is ultimately the highest body and membership derives from the ownership of shares. *Shareholders own the corporation by owning the shares*. Individually owned shares can be alienated. The majority of shareholders can also decide to sell the corporation (Design cooperative councils cannot decide to sell the cooperative).
- Whereas the relation between the stock corporation and the labour employed is – within the constraints of the labour contract – an author-

itarian one, the relation between the cooperative and the workers is a democratic one.

2§5.1. (Much of this subsection anticipates what is introduced later.) The elected management deliberates with the council about the general policies of the cooperative, as including the techniques used (the specific inputs mix); the internal division of labour; the planning of investments and the required additional workers in face of expected sales.

In any case, that is legally, the council has to approve of, at least:

- (a) The internal statute of the cooperative and changes thereof (the internal statute sets rules beyond legal rules) – this statute includes rules for the building up of ‘uncommitted’ reserves beyond the legally required reserves (on these reserves see 2§7, 2§9.0 and 2§9.1);
- (b) The annual Income account and Balance sheet of the cooperative (see 2§11.0);
- (c) The structure of the individual wages and dividend levels (see 2§8.0 and 2§9.0);
- (d) Increases in investments or the workforce, each beyond 5% of the past 5 years’ average;
- (e) Measures regarding foreseen decreases in the cooperative’s ‘uncommitted’ reserves (see 2§9.0) – beyond those due to foreseen retirement or movements (2§13.0);
- (f) In case this is opportune or required: a ‘restructuring plan’ for the cooperative (see 2§14.2).

Any further required approvals are stated in the cooperative’s statute.

2§5.2. For large cooperatives the council mentioned so far is called the ‘cooperative council’. The latter council can decide to also institute ‘departmental councils’. The latter elect the removable departmental management and deliberate over matters that it deems opportune for the operation of the department. In case the cooperative council is so large that most members can merely vote instead of argue, it deliberates over the matters mentioned under 2§5.1 and appoints one or more spokespersons for the cooperative council meetings (which does not interfere with the right of each individual to nevertheless speak at the cooperative council).

2§5.3. The management of the cooperative (and in case its departments) is chosen from the rank and file of the cooperative’s workers. It is up to the cooperative council (and in case the departmental council) to decide on who is eligible to be elected as a manager, and if, and how much, managing should be a rotating function. In case of an end of term or in case of removal, the former manager resumes her or his earlier position. (The reason for election from the rank and file of the cooperative’s workers is to evade managers of cooperatives to become a separate caste.)

SCHEME 2.2 *The cooperative and its council's rights and main authority*



As a general aside it is mentioned here that within the Design there is no room for ‘user cooperatives’ (including consumer cooperatives). The reason is that such cooperatives would inevitably restrict the governing competences of the worker councils. (On these user cooperatives and other types of cooperatives as existing in capitalism, see ch. 6, 6§2.)

TABLE 2.3 *Summary memo of 2§3–2§5: legal and effective ownership and governance*

	Capitalist stock corporation	Design worker cooperative
legal form unit of production	stock corporation	cooperative (2§3.0)
foundation unit of production	capital owning shareholders	workers (2§4)
highest governance body	general body of shareholders	cooperative council (2§5.0)
alteration governance body	purchase (and selling) shares	successful application (2§3.4)
legal ownership of assets	corporation: full ownership right	cooperative: no alienation right (2§3.0)
final/effective ownership of entity	shareholders: full ownership	workers: collective usufruct (2§3.0)
appointment (top-)management	body of shareholders	council elects from its ranks (2§5.0)

2§6 *Credit-debt relation between cooperative banks and other cooperatives*

2§6.0. COBs provide credit for investment to PWCs against an interest that consists of a risk premium and a component that on average covers the COB's material costs, the remuneration of its workers, the interest cost charged by the state's Savings and Loans Bank (2§6.3), a component for keeping up the required reserves. The interest and debt are serviced out of the PWCs' 'surplus' (on the surplus see 2§8.0).

Note. Because of a number of anticipations of sections to come, the following subsections might be difficult. In 2§22 the interconnections will be taken together.

2§6.1. The investment loans by COBs are the only way of external finance for the PWCs – notably there is no bonds market.

2§6.2. COBs provide investment loans to PWCs via the *ex nihilo* creation of new money – similar to the case of capitalist banks.⁸ (For an explanation regarding the Design see 2§22.) The balance sheet assets of PWCs – and/or their assets to be purchased – serve as security for the COB loans.

2§6.3. For their investment loans to PWCs, the state's Savings and Loans Bank (ch. 3, 3§16) can provide collateral secured loans to COBs. (The loans from this fund are indispensable for COBs because they cannot rely on other loans – notably there is no bonds market, nor a savings market – see also 2§16.2 and 2§22).⁹

2§6.4. COBs carry out payment transactions for their clients (PWCs, workers of cooperatives and state institutions, pensioners). Apart from that the COBs' single task is to provide investment loans to PWCs. This means that they shall provide no other loans (especially no loans to households and no mortgage loans to PWCs) and that they shall not engage in insurance provision.¹⁰ (See 2§15.1 on mortgage loans to PWCs.)

2§7 *Distribution of income prior to taxation: (a) legally required resistance buffer*

2§7.0. Cooperatives are required to build up a legally binding resistance buffer, expressed as a percentage of the assets. As an indication it is set at 10% for COBs

8 On the latter see Reuten 2019, ch. 2, pp. 103–5 (more extended pp. 103–20).

9 For the loans by the Savings and Loans Bank to COBs, see also Appendix 2A, 'Income account and balance sheet for a cooperative bank'.

10 For capitalist banks credit provision is merely a matter of profit. The often exceptionally high interest rates on consumer credit are one source of that profit (as well as a cause of financial trouble for the less well-off layers of society). Regarding COBs, however, the point is that other forms of credit or other activities should not hamper their credit potential for investment loans.

and at on average 30% for other cooperatives. Prior to having built up this buffer, workers shall receive no more than the minimum wage. As an indication the minimum wage is $1\frac{2}{3}$ (167%) of the minimum costs of living. Levels of buffers and of the minimum wage are set by the state's parliament. (The parliament is elected as set out in chapter 3, 3§1 – and as summarised in 1§7.)

2§7.1. The resistance buffer is built up out of the cooperative's surplus. The buffer may be used only when at some point the cooperative would make losses. (In that case the minimum wage rate rule again applies.)

2§7.2. Since wages can only rise when sufficient reserves have been secured and only while cooperatives operate at a surplus, the councils of all cooperatives have a continuous incentive to see to the cooperative's efficiency.

2§8 *Distribution of income prior to taxation: (b) wages and labour-time*

2§8.0. The value-added of cooperatives consists of the wages and of the surplus. (See *Table 2.4*, rows 1–7 for a conceptual outline.) Workers receive a wage, the wage rate scales being annually decided on by their council. Obviously wages are not allowed to be lower than the minimum wage as set by the state's parliament (ch. 3, 3§11).

Addendum 2§8. Likely moderate wage differences compared with capitalism. The wage rate of workers being decided on by the council of a cooperative, wage rates might differ between workers, especially in case of unpleasant work or in case of an expertise that is (temporarily) scarce. Nevertheless, because of the common decision-making it is not likely for wage differences to be as skewed as under capitalism. It is likely that the cooperative's management makes a wage rate proposal to the council. However, the managers being workers, their voting rights are on a par with all other workers.

In 'worker-owned cooperatives' as currently existing within capitalism, the bottom to top salary ratios are far less skewed than in capitalist corporations. (Around 2020 in e.g. the about 100 Mondragon cooperatives the maximum wage differences are 1:9 and in these cooperatives on average they are 1:5 (see 6§6). Although 1:9 is considerable, it regards a constellation surrounded by a capitalist labour market.)

2§8.1. So as to protect workers, a maximum labour-time duration per day, week and year is set by the state's parliament. (Regulation for part-time work is set out in ch. 3, 3§10). The parliament also sets the age at which workers are eligible for a state pension (ch. 3, 3§24).

2§9 *Distribution of income prior to taxation: (c) dividends*

2§9.0. The council of a cooperative decides whether all or part of the end of year disposable surplus is distributed as dividend to the workers. The non-distributed part is added to the 'uncommitted reserves' on top of the required buffer of the cooperative. (See *Table 2.4*, rows 10–13.) No dividends are distributed when the resistance buffer requirement is not met (2§7.0).

TABLE 2.4 *From value-added to disposable surplus and dividends: case of a PWC*

	Example*	
1	proceeds from sales	1000
2	non-wage current inputs (intermediates' cost)	-425
3	gross value-added [= sum rows 1 to 2] [†]	575
4	depreciation fixed assets	-50
5	value-added (= value-added net of depreciation) [= sum rows 3 to 4] [‡]	525
6	wages	-400
7	surplus (= operating surplus net of depreciation) [= sum rows 5 to 6]	125
8	net interest paid to bank (COB)	-25
9	amortisation bank loan (COB)	-50
10	surplus destined for building up the legally required resistance buffer [*]	-0
11	disposable surplus [= sum rows 7 to 10]	50
12	dividends distributed to workers	40
13	disposable surplus-part added to the 'uncommitted reserves'	10

* In terms of a non-specified currency.

† Macroeconomically this would be GDP.

‡ Macroeconomically this would be NDP.

* Relevant for start-ups; established cooperatives will normally have built up this buffer.

2§9.1. Thus for the disposable surplus, workers' councils can alternatively decide for either distribution as dividends or addition to the uncommitted reserves. In order to stimulate the latter, workers hold a claim on the uncommitted reserves (specified in 2§12). It is cautious to keep uncommitted reserves for possible future losses, in face of the rule that when, due to losses, the leg-

ally required resistance buffer must be used, workers receive no more than the minimum wage rate (2§7.1).

2§9.2. Given the COB's current costs, its provision on 'bad' loans and its dividends, any of its remaining 'disposable surplus' is a result of its level of interest policy. (See the Income account and balance sheet for a COB in Appendix 2A, Sheets 2A.2).

2§9.3. COBs are prudentially supervised by the state's Central Bank (CB). Prudential supervision includes supervision regarding the soundness of credit policies and reserve ratios (ch. 3, 3§13 on the CB).

2§9.4. In case of wage rate differences within cooperatives, their council might nevertheless decide that any distribution of dividends takes place proportionally to the work-time (FTE or in case part thereof) instead of proportionally to the wage rates.

2§10 *Intermediate conclusion: jobs preservation, maximisation value-added, and elimination of capital and the accumulation of capital*¹¹

2§10.0. The implication of the Design's cooperatives' economy above is that councils of cooperatives tend to aim for the preservation of the cooperative's jobs and for a maximisation of the average value-added per worker (wages and surplus).¹² Given that workers invested no funds in the cooperative (2§4.0), and given that they have no direct or indirect ownership in the cooperative (2§3.0), any enhancement of such funds ('valorisation') can play no role.

2§10.1. This aim contrasts with capitalist enterprises. The capitalist enterprises' aim is a continuous enhancement of the equity capital ('valorisation') through the maximisation of profits. By reinvestment of the latter this results in a continuous accumulation of capital. For these enterprises 'wages' are no aim but rather a cost, nor is 'employment' an aim but merely a profit instrument – thus employment and wages are a capitalist valorisation instrument.

2§10.2. Considering the balance sheets of capitalist enterprises and of Design cooperatives from an accounting perspective, the general structure of these may not seem very different.¹³ However, this does not mean that these are conceptually the same. The balance sheet assets of capitalist enterprises are a

11 About many points presented in this chapter, but especially those mentioned in 2§10 I have greatly benefitted from intensive discussions with Tony Smith. Often we have still, in mutual respect, disagreements or an open-ended dialogue.

12 Empirical studies on 'workers-owned cooperatives' within capitalism show that these cooperatives tend to adjust pay rather than employment in response to demand shocks (Fakhfakh, Pérotin and Gago 2012, pp. 10–11 and Pérotin 2014, p. 40).

13 For an example of the cooperative balance sheet see Appendix 2A.

capital-form expression; more specifically these show a (e.g. end of year) snapshot of the circulation of capital, which itself results from the capital outlay by owners/financiers and the employment of labour. Each of the latter is absent from Design cooperatives, notwithstanding that the cooperatives' assets are valued in monetary terms. Whereas for capitalist enterprises the assets and the employment of labour are an instrument for the profit part of value-added, the cooperative's assets are an instrument for the value-added per worker.

At the balance sheet's liability side, the cooperatives' reserves might be considered as a counterpart of the capitalist enterprises' equity capital, but again this does not mean that these are conceptually the same. As against equity capital, the reserves of cooperatives are no aim, but an instrument for job preservation.

2§10.3. Sections 2§10.0 to 2§10.2 imply that in the Design's economy the capitalist economic categories of 'capital' and of the 'accumulation of capital' are eliminated – these are eliminated along with the exploitation of labour.

2§10.4. Individual capitalists can be the shareholders in a stock corporation, or the owner(s) of a firm. The former's success measure is the value of the shares together with the rate of return (dividends/individual share capital); for the latter it is the net value of the firm together with the rate of profit on the capital invested. (The 'individual' cooperative worker's success measure is job preservation and individual remuneration – wages and dividends.)

The main conclusions of 2§10 are summarised in Table 2.5.

TABLE 2.5 *Summary memo of 2§10: assets dimension, and aims and instruments of production – comparison capitalist stock corporation and Design cooperative*

	Capitalist stock corporation	Design worker cooperative
dimension assets of legal entity	monetary capital-form	monetary valued (no capital-form)
short-term aim of production	profit [†]	value-added
medium-term aim of production	accumulation of net capital (equity)	work preservation
instrument for aim of production	labour employment and wages (costs)	cooperative assets and reserves
internal finance	capital shareholders	no funds of workers (2§4.0) [‡]
<i>in sum</i>	dominance of capital	dominance of labour; elimination of capital category

[†] Value-added is no aim, merely its profit part.

[‡] Nevertheless the minimum wage related to the legally binding resistance buffer (2§7.0) might be considered as a remote form of internal finance. This buffer cannot be alienated by individual workers, whereas capital shares can.

2§11 *Recordkeeping*

2§11.0. Cooperatives register their incomes and expenditures in regular book-keeping, and at the end of the year they shall record an ‘Income account’ and a ‘Balance sheet’ of their assets, liabilities and reserves.¹⁴ (See Appendix 2A on the arrangement of the two end of year records.) Each of the latter two shall be approved by an external registered auditor and by the cooperative’s council (see 2§5.1 on decisions by the council, and 2§18 on external registered auditors).¹⁵

2§11.1. An auditor-approved reduced version of the end of year statements (as in Appendix 2A) is sent to the ‘General statistical office’ (ch. 3, 3§33-B), which serves to determine the average remuneration of public sector workers (see ch. 3). The same reduced version is sent to the ministry of general cooperatives’ matters (ch. 3), which checks on the legal resistance buffer and the concomitant remunerations (2§7).

2§12 *Change of workforce: (a) additional workers*

2§12.0. When a cooperative expands, new workers are allotted a dated share in the uncommitted reserves (2§9.0), with an initial value of zero, that may grow over time.

2§12.1. To keep matters simple, the value of the new workers’ dated share (or that of current workers that want to extend or reduce their work-time) is calculated from the year following on the appointment mutation.

2§12.2. Some years after the start-up of a cooperative, it will normally meet the requirement of the legally binding resistance buffer; during this period the workers received no more than the minimum wage (2§7.0). The current workers of a cooperative might consider it unfair if additional workers benefit from the buffer for which the current workers forewent wage increments. In order to prevent cooperatives potentially having to compete on this point, the general rule is that all additional workers start for a period of five years at the minimum wage. (However, if – facing the buffer per current worker – this would mean that new workers over-sacrifice, then the period might be shorter than five years.)

14 The ‘income account’ states the sums of the *flow* of the costs and wages and of the surplus and its allocation. The ‘balance sheet’ states the *stock* of the assets, liabilities and specified reserves.

15 An auditor is a specialised accountant authorised to examine/verify accounts and accounting records of an institution.

2§13 *Change of workforce: (b) retirement or movements*

2§13.0. When workers retire (or want to work in another institution) they may receive their dated share in the then existing uncommitted reserves (2§12.0), that is formally paid out as 'postponed dividends'.

2§13.1. This rule (2§13.0) should prevent workers' councils skimping on the formation of uncommitted reserves. Nevertheless it may be the case that at the point of a worker's retirement or movement, the level of the uncommitted reserves was affected by earlier losses.

2§14 *Expansion and contraction of cooperatives*

• *Expansion*

2§14.0. In order to prevent cooperatives reaching a dominant market power, their allowed expansion is restricted. Expansion limits depend on the size of a country and on the relevant market. (As an indication, in a 'large' country cooperative banks might not be allowed to expand beyond a nationwide market share of 1%. Specific limits for other cooperatives depend on their relevant market – nationwide, regional or local – see further ch. 3, 3§45.)

2§14.1. In face of their expansion, cooperatives can move to a new location (cf. 2§3.3 on 'location'); the old one is then closed, and may be occupied by another moving cooperative, or a newly established one. (All real estate transactions operate via the 'real estate agency of the state' – ch. 3, 3§37.)

• *Contraction*

2§14.2. The core rule that cooperatives are not allowed to be sold in total or in parts (2§3.1) implies that, generally, the selling of assets requires a purchase of assets for at least the same total value. In face of this rule any *contraction* of a cooperative is complicated (that is, in case, contrary to the intention of 2§3.1, any cooperative would try to cash the value of some assets to the benefit of the current workers).¹⁶ This is solved by the following two rules.

- First, in case the selling of assets goes along with less than an equivalent purchase of assets, the revenue must be added to a special 'temporary committed reserves fund' (shown on the end of year Income account and Balance sheet). In some following year this fund can be drawn on *either* for the purchase of additional assets (that thus makes the initial less than equivalent purchase fully or partially undone), *or* for permanent extra jobs.¹⁷ During the time of such mutations two, instead of one, registered external auditors (each of different auditing cooperatives) have to sign for the end of year statements (cf. 2§11.0).

¹⁶ This contraction referred to might be a contraction of production but also a contraction of the value of the assets because the prices of replacement investments have declined.

¹⁷ Then, in effect, (part of) the initial change in the value of assets $\Delta A = (\Delta L)w$.

In case a renewed investment is not a reasonable option, the cooperative might merge with a promising cooperative start-up in which the former brings in its (extended) ‘temporary committed reserves fund’. (For the merged entity the single location rule of 2§3.3 applies.)

- Second, in case a cooperative operates for more than three years at losses such that it has to draw on its legally binding resistance buffer (2§7.1), it may – as part of a detailed restructuring plan – sell assets. In a report two registered external auditors (each of different auditor coops) have to sign for the soundness of the plan and the selling. A ‘restructuring plan’ requires the approval of the cooperative’s council.

For each of these two rules applies that in case the two auditors do not agree between them, the opinion of an added third one is decisive – each three nevertheless has to sign, one in case for disagreeing.¹⁸ Such reports of external auditors are sent to the state’s ‘cooperative restructuring office’ – ch. 3, 3§43 (this checks not on the cooperative but rather on registered auditors).

2§15 *Cooperatives’ ownership or renting of self-occupied premises*

The rules below avoid a real estate market that speculatively drives up real estate prices.

2§15.0. Cooperatives may own self-occupied premises. They purchase(d) these from the state’s Real Estate Agency that owns all other real estate. Alternatively cooperatives may rent premises from that agency. (Ch. 3, 3§37 on the Real Estate Agency.)

2§15.1. For the purchase of the premises cooperatives may get a mortgage loan from the state’s Savings and Loans Bank (ch. 3, 3§16).

2§15.2. Workers and pensioners may rent a self-occupied dwelling from the Real Estate Agency.¹⁹

2§15.3. In case cooperatives or individuals move location, transactions of self-occupied premises or dwellings operate via the Real Estate Agency.

Addendum 2§15. No real estate market. The Real Estate Agency formulates norms for its sales, purchase and rental prices and sets its prices accordingly (3§37). This together with 2§15 implies that there is no real estate market.

18 Once an auditor has taken on the task at hand, s/he is not allowed to resign in case of disagreement between one or two of the other auditors.

19 Dwellings are constructed in accordance with acclaimed urban and landscape designs, and provided in a variety of qualities at reasonable rents. All of the designs, the contracting and the building is carried out by a variety of PWCS (3§37).

2§16 *Bank payment accounts and their rate of interest*

2§16.0. PWCs hold a bank 'payment account' with the COB that grants them investment loans. Individual workers and pensioners hold a 'payment account' with a COB of their preference.

2§16.1. Bank payment-account holders receive a nationwide *uniform* zero rate of interest – or near to zero depending on a rate of inflation/deflation, as specified by the Central Bank (ch. 3, 3§13).

2§16.2. Payment accounts of workers or pensioners (including workers at the public sector institutions as introduced in Chapter 3) should not exceed twice their monthly income. At least amounts exceeding this shall be put on a fully guaranteed savings account with the state's *Savings and Loans Bank* which normally pays interest (ch. 3, 3§16). Primarily this fund provides collateral secured loans to COBs for the latter's investment loans to PWCs (2§6.3).

2§17 *Cooperatives specialised in insurance*

2§17.0. Qualified cooperatives, having the form of a PWC, set on insurance, such as regarding damage and damage liability. (Health provisions are free of charge – ch. 3, 3D7-A – and at an eligible age all receive a pension – ch. 3, 3§24.)

2§17.1. Licences are provided by the Central Bank that also undertakes the prudential supervision of these PWCs (ch. 3, 3§13).

Addendum 2§17. Exclusively financial markets for investment loans and insurances. It was indicated that in the Design there are no shares and bonds markets (addendum 2§3.0; 2§6.1; 2§6.3) – in ch. 3 it will be seen that nor is there a state bonds market. Section 2§16 implies that there is no market for savings. This means that there are only financial markets for investment loans (provided by COBs to other cooperatives – 2§6.0) and for insurances (2§17).

2§18 *Cooperatives specialised in auditing*

2§18.0. Specialised cooperatives, having the form of a PWC, set on auditing and in accounting. Among these a licensed category regards the work of 'external registered auditors' (mentioned in 2§11.0). On the latter see further ch. 3, 3§43.

2§19 *Competition between cooperatives*

2§19.0. In their market cooperatives compete with other cooperatives. Even with the safety rule of a required resistance buffer and the minimum wage before attainment of the buffer (2§7), competition may ultimately mean that a cooperative goes bankrupt. (It will be seen in ch. 3, 3§18, that jobless allowances apply, and that no one is out of work for more than two months – 'work' includes permanent jobs and paid traineeships, the latter being a lever to permanent jobs.)

2§19.1. The implication is indeed that cooperatives' workers face a risk. However, given the issues that a workers' council must approve of (2§5.1), any decreases in the uncommitted and the committed reserves of a cooperative will usually make workers alert before it is too late.

2§19.2. The market dominance of individual cooperatives is limited by, first, the rule that cooperatives shall be organised in no more than one single location (2§3.3), second, the take-over prohibition (2§3.2), third, the rule that cooperatives are not allowed to found other cooperatives (2§4.0), fourth, the rule that cooperatives are not allowed to expand beyond ceilings that in their relevant market would generate market power (2§14.0).

Addendum 2§19. Tendency for non-aggressive and non-destructive competitive interaction between cooperatives. Section 2§10 indicated that the aims of cooperatives are very different from the aims of capitalist enterprises. Cooperatives aim at preservation of jobs and maximisation of the average value-added per worker (v_A/L). Capitalist enterprises aim at maximisation of profits over the equity capital (P/EC), where the investment of profits generates enhancement of the equity capital (accumulation of capital); employment is merely a necessary instrument for this process. These differences make that the type of investment decisions, as well as competition processes are utmost dissimilar in the two constellations.

Consider the introduction of a cost price reducing new technique by a cooperative. As in capitalism other units of production in the same branch will usually not immediately follow suit, because they are burdened with the fixed costs of their current means of production. Cooperatives will only scrap the assets that make part of the currently used technique when the new one offers a *net* value-added per worker ('net' that is, taking into account the costs of scrapping) greater than the value-added per worker generated with the current technique on its existing plant.

This means that the cooperative that introduced the new technique has a (temporary) comparative advantage (this is similar for a capitalist and a cooperatives economy).

A capitalist enterprise will often try to use such an advantage for a price competition that squeezes out competitors so as to gain an extra market share. When successful, it can at the increased market share often increase prices to near the previous level. In sum it thus increases its amount of profit, at an increased accumulation of capital.

However, for a cooperative this is not a likely action because with the productivity increase at the current market price, the initiating cooperative will maximise its value-added per worker – which will result in higher wages and/or dividends – leaving the production and jobs of compet-

itors unaffected. In this respect the cooperatives' economic interaction tends to be non-aggressive and non-destructive regarding competitors. Comparatively this tends to result in less technical-change-intermittent joblessness. And to the extent that competitors' physical plants are not scrapped, less dwindling of environmental resources.

Product innovation can, with some adaptation, be analysed similarly.

2§20 *Distribution of wealth prior to taxation*

2§20.0. Given the economic organisation set out above, it is to be expected that the resulting skewedness of the distribution of wealth is very moderate in comparison with the capitalist system.

First, workers are merely the beneficiaries of the cooperatives' distributable income; they do not own the cooperative; they do not own the assets of the cooperative, nor can these assets be alienated (2§3.0); no individual owns the net wealth of a cooperative. (In contradistinction to capitalism's ownership of a firm or of the shares in a corporation.²⁰ Hence in the cooperatives economy such ownership cannot be inherited by the children or other relatives of rich individuals.)

Second, real estate can also be no source of individual wealth skewedness, because this is owned by a state agency (2§15.0).

Third, workers and pensioners can own material assets and liquidity (only a very moderate amount of these can be inherited – 1§12 and 3§4 Table 3.7). However, as we may expect that the cooperatives' wage rates are far less skewed than under capitalism (addendum 2§8), this also moderates the skewedness of the distribution of these types of wealth in comparison with capitalism. The same applies for dividends, which might even be distributed proportionally per worker (2§9.4).

Division 2. Direct support of cooperatives by state institutions, and the macroeconomic connections between households and cooperatives

After a summing up from Division 1 of the direct support of cooperatives by state institutions (2§21), the macroeconomic connections between households and cooperatives are shown (2§22).

20 Regarding the capital that households own in capitalism: for the average of 24 OECD countries in 2019, the top 10% richest households owned 85% of the capital in enterprises – ranging from 63% to 98% for individual countries (Reuten 2023b, §3.5, Graphs 9 and 10).

2§21 *The direct support of cooperatives by state institutions*

This section sums up the direct support of cooperatives by state institutions as referred to in Division 1. The state institutions themselves will be properly introduced in chapter 3. This direct support regards the following four subjects.

1. *Foundation of COBs.* It was mentioned in 2§4.1 that the foundation of a COB – after the drawing up of a ‘cooperative bank plan’ by workers – can be assisted by the state’s *Guardian Bank*. (On the latter see ch. 3, 3§14; on the foundation see Appendix 2B.)

2. *Foundation of PWCs.* For the foundation of a PWC it was mentioned in 2§4.2 that – similarly after the drawing up of a ‘cooperative plan’ by workers – a COB may grant investment loans to the cooperative in formation. It was also indicated that, should no COB be willing to grant credit on basis of the plan, the initiators can apply with the state’s *Investment-credit Guarantee Fund* for the early security of the cooperative (on this fund see ch. 3, 3§15).

3. *COBs investment loans to PWCs.* In 2§6.3 it was indicated that for their investment loans to PWCs, the COBs can be supported by the state’s *Savings and Loans Bank (SLB)* – the latter providing collateral secured loans to COBs (on this fund see ch. 3, 3§16). The reason for such support in the Design is that with the absence of bonds markets, it would otherwise – and with reasonable interests on loans to PWCs – be almost impossible to meet the COBs resistance buffer requirement (2§7).²¹ (As will be seen in 3§16 the SLB might, if required, by differentiating the interest rate that it charges, influence investments generally, or encourage certain kinds of investments.)

4. *Premises of cooperatives.* Cooperatives may either own self-occupied premises, or they may rent their premises from the state’s *Real Estate Agency* (2§15.0). (On this agency see ch. 3, 3§37 – rents shall be costs covering and further reasonable in face of their location.) For the purchase of the premises cooperatives may get a mortgage loan from the *Savings and Loans Bank* (2§15.1).

Points 2 and 4 above imply that there is substantial support for start-up PWCs (as including very small ones, also perhaps by a couple of recent graduates in technology fields).

2§22 *Macroeconomic monetary connections between households and cooperatives*

Scheme 2.1 (2§1) showed the macroeconomic connections between households and cooperatives in abstraction from savings. In 2§16.2 it was indicated that payment accounts of workers (and pensioners) with COBs should not

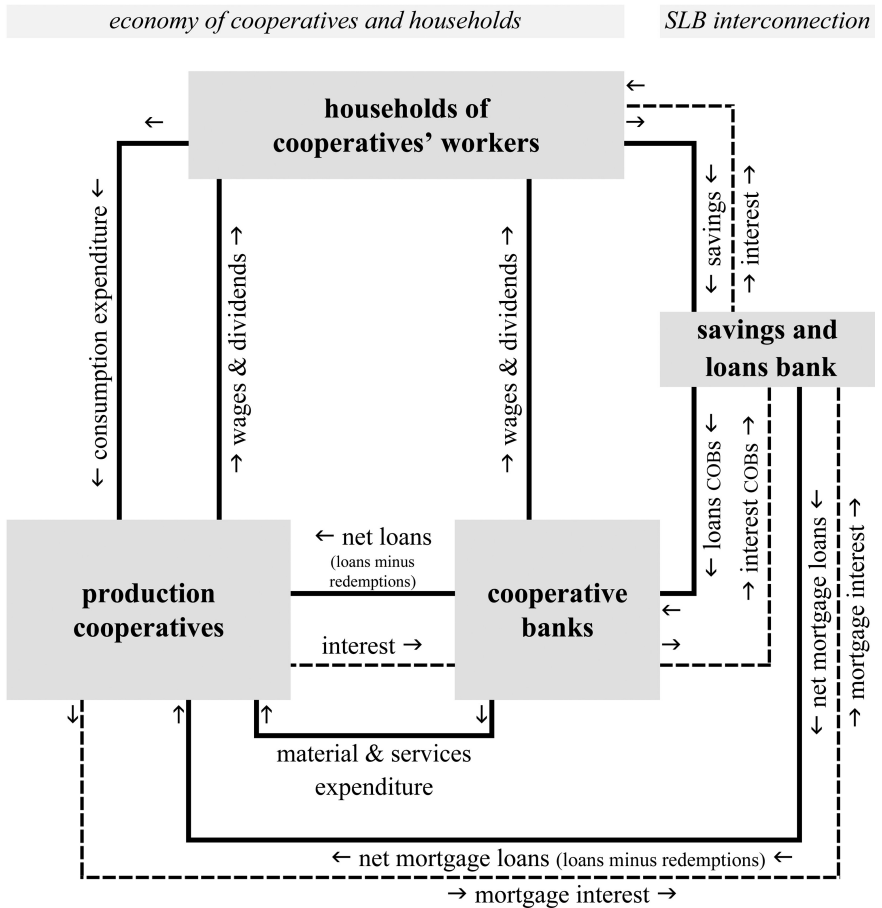
21 For the loans by the fund to COBs, see also Appendix 2A, ‘Income account and balance sheet for a cooperative bank’.

exceed twice their monthly income and that at least amounts exceeding this shall be put on a fully guaranteed savings account with the state's *Savings and Loans Bank*. The previous section indicated under point 3 that the same bank provides loans to COBs, and under point 4 that the SLB provides mortgage loans to cooperatives.

On this basis *Scheme 2.6* shows the full macroeconomic monetary connections between households and cooperatives (now including savings), for which the interconnection with the 'Savings and Loans Bank' must be included.

SCHEME 2.6 *Macroeconomic monetary connections between households and cooperatives, and the interconnection with the state's 'Savings and Loans Bank' (all in terms of annual 'flows')*

interest flows are dotted



Elucidation Scheme 2.6. (1) 'Net loans' (stream from COBs to PWCs) is the flow of loans minus the flow of redeemed loans. (2) Similarly, the 'net mortgage loans' (stream from SLB to PWCs) is the flow of these loans minus the flow of redeemed mortgage loans. (3) In principle the 'loans COBs' (stream from SLB to COBs) keeps pace with the 'net loans' (stream from COBs to PWCs); the scheme shows the annual flow of these loans.

Note on economic growth and money creation by banks. In a monetary economy, any economic growth must start with money creation by banks. In the previous division it was mentioned that COBs provide investment loans to PWCs via the ex nihilo creation of new money (2§6.2). Such a money-creating loan pre-finances PWCs and anticipates their future production. It is a pre-finance, because after the additional production the debt is serviced out of the PWCs' surplus (together with interest for it). The additional production generates additional income, expenditure and saving. *This saving may, in total or in part, substitute for the bank's pre-finance of the investment.* Thus this is a *substitution 'ex-post'* the additional production.

In capitalism this ex-post substitution out of savings is effectuated via three channels: directly via savings accounts with banks; indirectly via the issue of new bonds or new shares. In the Design the latter two are eliminated, and all savings are collected by the 'Savings and Loans Bank' (SLB). It is thus the latter that ex-post substitutes for the ex-ante COB-finance of production.

Scheme 2.6 is a simultaneous picture rather than sequential one, thus it does not explicitly show the ex-ante and ex-post distinction referred to. The stylised sequence would be: (1) net loans by COBs to PWCs through the banks' ex nihilo money creation; (2) purchase of means of production between PWCs; (3) PWCs production and wages payment; (4) consumption expenditure by households; (5) saving by households collected by the SLB; (6) finally, SLB loans to COBs. Phase (6) then substitutes ex-post for phase (1), either in total or in part. For any remaining part the PWCs remain in debt with the COBs.

Such a sequence is opposite to that of the neoclassical economics' 'loanable funds theory'. One key point of the notions above is that macroeconomically savings do not precede investments, but rather that investments precede savings. This is a Keynesian notion, but in terms of a macroeconomics that includes the by commercial banks ex nihilo creation of money and finance of enterprises, it has been highlighted in the theory of the Monetary Circuit that evolved from about 1980 in France and Italy.²² Similar ideas have now filtered

22 See for example Graziani 1989, 2003 and Bellofiore 1989, 2005, and the introductions and

through circles of bankers. As in a 2015 paper by members of the research departments of the IMF and the Bank of England, Jakob and Kumhof, called 'Banks are not intermediaries of Loanable Funds – and why this matters', its key sentence being: 'Saving does not finance investment, financing does'.²³

Division 3. The cooperatives economy's markets; and reasons for the book's not taking the 'socialism' road

The General Introduction mentioned that this book presents a form of society beyond capitalism and socialism. So far, I occasionally compared the Design with key aspects of capitalism – especially in some addenda. Until now I have been silent about a would-be socialism that at least combines (and in the ideal case unites) economic and political democracy – 'would-be' because, inasmuch as the Design, it is not, nor has been, actual in my view. In three brief sections I will say something about socialism, but the previous sentence implies that I will have to relate to a shade or angel. More directly I will give reasons for the road not taken in this book.

The first section of this division expands on some relevant implications of the previous division (2§23). After a brief note on collective ownership (2§24), the third section sets out some aims for an outline of socialism (2§25). The final section posits, by way of questions, seven problems that a socialist central planning would have to solve (3§24).

2§23 *The Design's markets and commodification of products*

Early on in Division 1 it was mentioned that 'households and cooperatives, and cooperatives mutually, are interconnected via markets' (2§2.1). The General Introduction mentioned about the Design that individuals have free choice of particular consumption and free choice of occupation, similar as in capitalism.

The Design's economy is for consumers hardly different from capitalist consumer markets, also in that the free choice of particular consumption is limited by income constraints. (Hardly different: in ch. 3, 3§8, it will be seen that cooperatives are not allowed to advertise.) For cooperatives the functioning of markets for means of production (investment goods and intermediate deliveries) and for consumer goods output will equally be similar. To put it straight:

contributions in Deleplace and Nell (eds) (1996), Rochon and Rossi (eds) (2003), Fontana and Realfonzo (eds) (2005), Arestis and Sayer (eds) (2006). More references are in the former and Reuten 2019, p. 149.

23 Jakob and Kumhof 2015, p. ii.

the Design will still have commodification of products – I deplore this, but I see no better feasible alternative (see the next sections).

For labour the organisation of production is radically different in comparison with capitalism (2D1). Nevertheless, the free choice of occupation will be as much limited as in capitalism, that is, by the specific labour qualification requirements of cooperatives. A plumber or a medical doctor may not find work in her/his profession if the demand is deficient. Then, s/he still would have to work, though in another profession. In the Design there is as much an enforcement to work as there is in capitalism. (And whatever socialism would exactly look like, there too those who can work will be enforced to work.) This means that the Design does not get beyond the hiring of one's labour capacity. In fact Design cooperative workers are (within an age bound) enforced to become members of an association of workers (2§3.0), and the meaning of a Design 'labour market' is the constellation of a supply and demand for such memberships. However, this does not mean that labour capacity is a commodity as it is in capitalism. Instead, once a worker is a member of an association of workers, they have like all other workers – and within the constraints set by parliament – full say over the product of the cooperative; thus it works for its self-governed collective – not for alien owners of capital as in capitalism. In this sense labour is far from being commodified in the Design.

Cooperatives are superior to capitalist enterprises in that cooperatives will tend to preserve their members' jobs better.²⁴ Nevertheless, there will still be school-leavers or people temporarily out of work for other reasons. These will have to apply with a cooperative (or with a state institution or a state-financed workers' council governed foundation – ch. 3). Sometimes successful, sometimes not. That regards the quantity aspect of a labour market.

However, the Design has no full-fledged labour market (with quantity *and* price adaptation), because in the Design one potential worker cannot undercut another: the wage is the cooperative's wage, and wage scales are annually fixed. An important side of the quantity aspect is that – as will be seen in ch. 3, division 5 – in the Design no one is out of work for longer than two months – where 'work' includes permanent jobs and paid traineeships, the latter being a lever to permanent jobs.

On markets, finally, recall that in the Design there are only two financial markets, a market for investment loans and a market for insurances (addendum 2§17). On the demand side of the former, non-banking cooperatives (PWCs)

24 This is also the experience for worker-owned cooperatives existing within capitalism (Pérotin 2012, p. 38).

call for investment loans, and cooperative banks (COBs) compete for these – investment loans are their sole business.²⁵

2§24 *A note on the ownership of means of production*

In capitalism, the means of production are privately owned, that is, directly or indirectly by members of the capitalist class. In the Design, the economic domain means of production are restrictively owned by cooperatives (the right of alienation is excluded), without workers having any direct or indirect ownership in these (addendum 2§5). In the remainder of this division, I will suppose that in socialism the means of production are collectively owned. This implies that the socialist collective ownership is effectively the same as the cooperatives' restricted ownership, because there is no party to alienate the collective assets to.

2§25 *Aims for a socialist alternative to the Design*

It seems possible to devise a constellation in which individuals' short-term preferences for specific consumer goods can be signalled to a relevant information collecting office. Perhaps 'iffy' medium-term preferences can also be signalled. (That is not inconsistent with the Design, and the information collecting office could make this information public so that cooperatives can use it. It is also not inconsistent with the Design for cooperatives to engage in some form of 'indicative investment planning' (investment schedules that combine forecasts and planning) that in the 1960s and 1970s was practised in France and Japan.²⁶ This might result in some coordination of investment, but it would not get beyond product markets and the quantity aspect of a labour market – 2§23.)

Quite another matter for a socialist alternative would be to get from a signalling of individuals' short-term preferences (and 'iffy' medium-term preferences), first, to an actual collective planning of investment and production (this is perhaps feasible), and second, to an actual carrying out of such production (this poses big problems, given the interconnection of sectors and branches of production, and given that even medium-sized economies easily encompass a million enterprises).²⁷ This takes us to projects outlining a future socialism.

25 COBs shall not engage in insurance; savings are collected by the state's 'Savings and Loans Bank' (2§16.2); the interest rate on payment accounts is uniform nationwide (2§16.1); households can get no consumer credit (2§6.4), and any mortgage loans to cooperatives are provided only by the 'Savings and Loans Bank' (2§6.4).

26 On the French variant see, for example, Dalton (1974, pp. 154–60), Bonnaud (1975, pp. 93–110) and Nielsen (2008). On the Japanese variant see, for example, Caves and Uekusa (1976a; 1976b), Trezise and Suzuki (1976) and Nielsen (2008).

27 The currently common (UN 2008) Standard industrial classification of economic activit-

In principle such a project has my sympathy, provided it improves on the Design in meeting at least the following aims. *First*, it would have to overcome especially the hiring of one's labour capacity such that there is a non-enforced allocation of labour capacity that fares better than the Design regarding the free choice of occupation (I consider this the weak point of the Design). *Second*, it should have a solution for the minimisation, if not the overcoming, of joblessness – also in case a unit of production is deficiently productive. (As indicated, in the Design no one is out of work for more than two months.) *Third*, the organisation of the units of production should be at least as democratic as the Design. *Fourth*, the overall remunerations between the economic and state institutions would have to be at least as equitable as in the Design (details about remuneration in state institutions are presented in ch. 3). *Fifth*, the general constellation should be set out in sufficient detail such that its feasibility can be scrutinised.

I would not exclude that such a constellation can be devised; however, at this point I have not seen a non-iffy one that is sufficiently detailed.

2§26 *Central planning as alternative for the cooperatives' local planning*

Democratic central planning of investment and production might be an alternative for the multiple local democratic planning processes in Design cooperatives. Below I sum up seven main questions for an outline of socialism that encompasses central planning. I will suppose that the governing organs of the state are elected at least as democratically as will be set out in ch. 3, 3§1 (cf., briefly, 1§7). I also suppose that the socialist parliament institutes a 'central planning organ' (CPO) that is accountable to parliament. The CPO devises investment, production and production allocation plans, and is responsible for the overall carrying out of these plans. (Planning and implementation inputs from lower-level democratic organs are not excluded even when these complicate the planning and implementation process.) I leave unspecified if, what for, and to what extent markets are adopted for the implementation process – evidently a feasible project would have to specify this.

1. *Democratic character of complex central planning.* The central planning of investment and production is a highly complicated technical matter (see also the previous footnote). It is difficult to see how and to what extent this can be

ies (SIC) distinguishes at the five-digit level 731 branches in which numerous enterprises are active. Most of these are chain-interdependent regarding their intermediate inputs. Planning and actual production would regard the further digits level of individual enterprises (the number being country dependent, e.g. 5.6 million labour employing ones in the USA 2016; in France 2016, 6.3 million that were employing over 250 people; in the Netherlands 2020, a total of 1.7 million – in a population of 17.3 million.).

democratically scrutinised, apart from the posting of some mainline targets. Parliament (if not the people at large) would have to be confident that it has a thorough, at least indirect, influence on it, and that it could adapt the planning. I would think that this is an immense problem. On the other hand, to the extent parliament could and would have a considerable influence, this may pose legitimisation problems in case there turn out to be failures of planning or planning implementation.

2. *What are the dimensions of the planning process?* Any mode of production must be productive such that outputs > inputs. The inputs are various means of production, that during production are worked up by labour, resulting in the output. Because physical entities cannot be added up in a sufficiently detailed way, I take it that also in a feasible socialism there must be a measure of value similar to, if not necessarily the same as, a monetary measure of value.²⁸ Thence productiveness requires 'value of current outputs' > 'value of current inputs' – the difference between the two being 'value-added', which is the product of current labour. This productiveness is a macroeconomic requirement, and also a continuity requirement at the micro level of units of production. There so seems to be a generalised requirement of 'valorisation' of the current inputs value in the sense of production of value-added.²⁹

3. *How to take account of the degree of the roundaboutness of production?* Inputs are a 'means of production mixture' of various physical duration. An adequate measure for productiveness requires that these durations are taken account of, so that – for the same output – the costs of one possible mixture can be compared with the costs of another possible mixture. In other words, we need a measure for the degree of 'roundaboutness' of the production (whatever this measure is called; historically 'interest' may be too controversial).

4. *What is the criterion for labour's share in the value-added?* Someway it must be decided what share of the value-added is distributed to its producers. This would be the part that they can use for consumption and perhaps other private purposes. A related question is if this share is uniform for all workers, and if not, what is the criterion for divergences? Preferably this (or these) distribution criterion (or criteria) should be non-discretionary. The other part of value-added, the 'surplus', will be destined for investment assets and for collective provi-

28 This also applies for Saros (2014) although he is somewhat messy about the dimension; in any case, he has prices.

29 A socialist mode of production would seem to have valorisation in this sense in common with the Design mode of production. The capitalist valorisation, which is focussed on the valorisation of capital in the form of the production of surplus-value, is a special case of the production of value-added. See Reuten 2019, p. 62 on the terminology.

sions – including allowances for the young and old aged. A surplus destination to investment assets is no social necessity; however, for a constant real income per head, there would have to be investment in case of population growth. (Assuming that investment is environmentally sustainable.)

5. *How does the CPO get the local production units to do what it had in mind?* If the local production units do what they were assigned to do, how is it avoided that this might be experienced as an alien force? (See further point 7.) In case assignments go along with reward and penalty incentives, we might get to a constellation that mimics market-like incentives. In case the local unit voluntarily and full-heartedly aims to meet the production targets, it may be confronted with suppliers of means of production that did not meet the targets – or with planning mistakes. In case the producer is an intermediate one, this permeates through the production chain; in case it produces consumer goods, it has effect at that end. Each boils down to production losses, and in underproduction or a combination of underproduction and overproduction. I do not argue that this will inevitably go wrong, but rather that it might go wrong. On a small scale the latter is not harmful, but it is when on a large scale.

6. *How will consumer goods be allocated in practice?* Given the value-added share that is distributed to workers for consumption purposes (point 4 above), via what allocation mechanism will it get to the households in their preferred qualities and quantities? – the households that at some point could perhaps express their consumption preferences (quite apart from them possibly having changed their mind).

7. *Central planning versus the local planning by units of production.* The final question is if, and to what extent, the democratic central planning would be experienced as an alien imperative by the units of production and their workers. (That is, hypothetically in comparison with the manifold local democratic planning processes such as in Design cooperatives.) This would require a democratic state administration far beyond the best-practices democracy ever seen in capitalist or other systems. This last point should evidently be the first point as it is a precondition for the rest. A related key question is if, and how, that democracy can be combined with a deep democracy at the level of the units of production.³⁰ ‘Deep’ would mean that the decisions at the latter level really

30 Suvin (2016, p. 300) remarks in reflection on the practice of socialist Yugoslavia (1943–91): ‘... even the classical means of production (factories, land, etc.) are not really socialised unless they are managed and determined by a genuine self-government of all the working people concerned. This applies to micro-decisions in each enterprise but then, crucially, also to the economic macro-decisions – setting up the rules of accumulation, organisation, taxation, etc., for the economy as a whole.’

matter in their effect, and such that the experience and learning effects of the latter permeate to the state administration's democracy – in the ideal constellation these would have to constitute a unity that is experienced as a unity (the latter should be the continuous aim).³¹

All these are big questions that I will not be able to answer. I guess that the answers and their elaboration require far more space than was devoted to the Design's economy in Division 1 of this chapter. For a related reason the presentation of the Design's state institutions in the next chapter will take considerable space.

Addendum 2§26. Comments on Tony Smith's proposed form of socialist planning

Of the forms of socialist planning that I have seen, the one proposed by Tony Smith (forthcoming; ch. 4, section 'The investment process') makes most sense to me. Rather than proposing a form of planning aiming at a full matrix including every individual input and every individual output, he proposes a socialist adapted *variant of indicative planning*. Smith posits: 'An indicative plan can effectively direct production to a social goal without having to specify the full range of inputs units of production must mobilize in the production process or the full range of outputs they must produce. Socialist planning is indicative planning on a far more comprehensive scale than capitalist developmental states.' It takes the form of 'establishing general priorities for production, investing in units of production that have the most promise of fulfilling those priorities, allowing those units of production to determine for themselves the best way of meeting the priorities set for them, monitoring their performance, and then favouring enterprises that have furthered social priorities effectively over those that did not.' He adds that we cannot assume 'that the actual needs and wants of social agents in the future, or the products that could then address those wants and needs most effectively, will remain what they were at an earlier point in time. Either the freedom of choice of those using the products would have to be suppressed, or the deviations from the plan would quickly become so extensive the plan was left in shambles.' Smith has indicative plan periods that each last for five years. 'There are two main steps in the allocation of investment. Units of pro-

³¹ Without wanting to open a discussion on the precise meaning and feasibility of a 'free association of producers', I cannot resist to remark that for a road to such or a similar association, a departing from Design cooperatives might be more obvious than departing from state ownership of the means of production and central planning.

duction first formulate investment requests and forward them to local Social Investment Centres. These Centres then evaluate the requests and provide investment funds to units of production on the basis of these evaluations.' (There are also Regional Social Investment Centres.)

Smith does not overcome the first point of 2§25 (the hiring of one's labour capacity), even when he never uses the term labour market for his design of socialism. In my view he is insufficiently specific about the second point of 2§25 (solution for the minimisation, if not the overcoming, of joblessness). However, points three to five of 2§25 do apply for Smith's design, which is quite an achievement.

The remainder of this Addendum refers to 2§26.

Point 1 (central planning). As mentioned, Smith's design of socialism has no central planning. Nevertheless, his sophisticated form of indicative planning (carried out at local, regional and national levels, and when relevant also at an international level) is institutionally rather complex, but thoroughly democratic. Once established after a presumably very complex transition, it seems nevertheless feasible.

Point 2 (dimensions of the planning process). Smith's design has accounting costs and accounting prices. Interestingly he has an accounting value of outputs = accounting value of inputs, whence he evades 'valorisation': The socialist 'production collectives' (enterprises) receive a grant-like investment fund which covers material inputs and the accounting income of their workers (on average the accounting incomes for each production collective are equal);³² these equal the sum of accounting prices of the output. The accounting input costs and accounting output prices are fixed during the five-year plan period. In case a production collective turns out to be inefficient during this period, it may no longer receive investment funds in a next plan period (this implies that joblessness is not excluded – nor is it in my Design). In my view this means in effect that collectives in the same sector adopt sales quantity competition – presumably by trying to offer a higher quality of products than that of their competitors. Smith does not use the term competition.

Point 3 (degree of the roundaboutness of production). I infer from Smith's text that the institutions that provide investment funds take this into account.

Point 4 (labour's share). See point 2.

32 As for my Design's workers' councils, Smith's worker collectives of the production entities can democratically decide for income differences between workers.

Point 5 (implementation of the [indicative] plan). In Smith's design, production collectives are free to decide on the implementation of production – given the investment fund that they received. In case of inefficiency the possible 'penalty' is the withholding of investment funds in the next plan period (see point 2).

Point 6 (allocation of consumer goods). For the consumer goods that are not allocated via the fully democratic elected governmental institutions (i.e. the non-collective ones), Smith has in fact consumer goods markets – without him using that term – in which consumers buy products of their preference against per plan period fixed accounting prices. Given the goods offered by production collectives (point 2) consumers will presumably first go for the highest quality goods offered. In case qualities would be rather diverse, this implies in my view – given the fixed prices – that there will be a queuing for the top-quality goods, and that consumers next have to go for their second-best options. (In my view this is rather defective, but once consumers are accustomed to it, it is nevertheless feasible.)

Point 7 (central planning experienced as an alien imperative). This does not apply *at all* for Smith's indicative planning. Prior to an indicative plan period, agents (both consumers and production collectives) have *plenty* of opportunities to express their needs (consumers and material production inputs for production collectives) and to express how they plan to carry out the production (production collectives).

In sum. Smith's variant of indicative planning has some defects (my Design proposed in the current book also has defects), but Smith's form of socialist planning is the best I have seen.

Concluding summary chapter 2

In the Design's cooperatives economy, workers constitute the single economic class. As against capitalism, there is no class of owners of means of production – hence no antagonism between those owners and workers. In contrast with state socialism, the state does not own the economy's means of production – except for rented out agricultural land. Below five main further characteristic of the Design's cooperatives economy are summarised.

1. Democracy at the point of production. Worker cooperatives constitute the units of production – production in the wide sense, as including retail and other services. Core of the Design is the democratic decision-making at the

point of production by the workers who carry out the production – the cooperative's workers' council being the highest governing body. The council elects the management from its ranks, and can also remove the management. Democratic decision-making regards: (a) the policies of the cooperative, as including the techniques used (the specific inputs mix), the internal division of labour; (b) the planning of investments and the required additional workers in face of expected sales; (c) the determination of the internal wage scales (in case these are not uniform in face of unpleasant work, or an expertise that is (temporarily) scarce, or for other reasons that the council deems opportune); (d) the allocation of the cooperative's surplus, including the distribution of dividends.

2. *Ownership-like characteristics.* The cooperative as legal entity holds a restricted ownership of the cooperative's assets – the right to alienation of the cooperative is excluded. This should guarantee that cooperatives are continuous between generations of workers. A cooperative is founded by a group of workers; the foundation requiring no own funds of the workers. Whereas workers collectively are the sole beneficiaries of the cooperative's distributable income – they are the usufructuaries of the cooperative – they have no direct or indirect ownership in the cooperative and its assets; nor is the membership of a cooperative bound to refundable or non-refundable dues. Because workers constitute the single economic class, and given the ownership-like relations just outlined, there is no means of production owning class; by implication no class that exploits the working class (this is one main distinction from capitalism). One similarity between a capitalist 'foundation' and a 'Design worker cooperative' is that these legal entities have no owners. One relevant distinction is that the cooperative has members, whereas a foundation has no members.

3. *Tendential aim of cooperatives' councils; elimination of the categories of 'capital' and 'accumulation of capital'.* 'Value-added' is the sum of wages and the surplus. Given the Design's interconnections, councils of cooperatives tend to aim for, first, the preservation of the cooperative's jobs and, next, for a maximisation of the average value-added per worker – furthermore, the last can increase by expansion investments and workforce increases. The reserves of cooperatives are no aim, but an instrument for job preservation; the cooperative's assets are an instrument for the value-added per worker. Because, as just mentioned (point 2), workers have no direct or indirect ownership in the cooperative, nor invested funds in the cooperative, any aim of enhancement of such funds ('valorisation') can play no role. These considerations imply that

the Design eliminates the capitalist economic categories of 'capital' and of the 'accumulation of capital' (2§10).³³ They also imply that the type of investment decisions by cooperatives are significantly different from those of capitalist enterprises.

Table 2.7 lists the Design's economic characteristics mentioned above (points 1–3), as well as some other ones – each in comparison with a capitalist economy.

TABLE 2.7 *Key distinctions between the capitalist and the Design cooperatives economies*

Production relations	Capitalist economy	Design economy
economic classes	capitalist and labour	labour (single class) (2§1.0)
relation to means of production	property by members capitalist class	usufruct by labour (2§1.0; 2§3.0)
economic class relation	exploitative	not applicable: single class (2§1.0)
organisation units of production	authoritarian	democratic (addendum 2§5)
measure of value [†]	monetary	monetary (2§2.0)
general form efficient production	value output > value input	value output > value input (2§26 sub 2)
result of efficient production	value-added (VA)	value-added (VA) (2§1.0; 2§8.0)
producer of value-added	labour	labour (2§1.0)
core economic category	capital	labour; category capital eliminated (2§10.3)
aim of production	profit and accumulation of capital	work preservation and VA (2§10.0)
instrument for aim of production	labour employment and wages (costs)	cooperative assets and reserves (2§10.2)
internal finance	capital shareholders or owner(s) firm	no funds or dues of workers (2§3.0; 2§4) [‡]

33 The aim of capitalist enterprises is to accumulate capital and to maximise the profits as calculated over the equity capital – the profit rate. At a given profit rate, the accumulation of capital also maximises absolute profits. For these enterprises 'wages' are no aim but rather a cost, nor is 'employment' an aim but merely a profit instrument – thus employment and wages are a capitalist valorisation instrument.

TABLE 2.7 *Key distinctions (cont.)*

Ownership and governance	Capitalist stock corporation	Design worker cooperative
legal form unit of production	stock corporation	cooperative (2§3.0)
foundation unit of production	finance-capital-owning shareholders	workers (2§4)
funds required for foundation	finance capital of shareholders	none (2§4)
highest governance body	general body of shareholders	cooperative council (2§5.0)
alteration governance body	purchase (and selling) shares	successful application (2§3.4)
legal ownership of assets	corporation: full ownership right	cooperative: no alienation right (2§3.0)
final/effective ownership of entity	shareholders: full ownership	workers: collective usufruct (2§3.0)
appointment (top-)management	body of shareholders	council elects from its ranks (2§5.0)

† This regards the means of payment for – and the means of circulation of – commodities or other entities.

‡ Nevertheless the minimum wage related to the legally binding resistance buffer might be considered as a form of internal finance. This buffer cannot be alienated by individual workers, whereas capital shares can.

4. Free choice occupation, specific consumption and cooperative's investment.

Predicated on the Design's commodity markets for consumer goods, individuals have free choice of specific consumption. Predicated on the quantity aspect of a labour market (2§23), individuals have a free choice of occupation, somewhat akin to a full-fledged capitalist labour market. Predicated on commodity markets for means of production, cooperative councils have a free choice of (specific) investment and techniques – constrained by investment loans from cooperative banks.

5. Market dominance, technical change and competition. In the Design the possible market dominance of individual cooperatives is restricted by four rules: first, they shall be organised in no more than a single location;³⁴ second, they are not allowed to found other cooperatives; third, they shall not take over other cooperatives; fourth, they shall not expand beyond ceilings that in their relevant market would generate market power (as an indication, for cooperative banks in a 'large' country the ceiling might be nationwide market share

34 The primary reason for this rule is that a multitude of locations would dilute the power of the cooperative's council. The rule also affects potential market power.

of 1%).³⁵ Nevertheless these rules are not incompatible with large-scale production; country dependent a single cooperative might provide jobs to several tens of thousands of workers in a location of several hundred thousand square metres.

These restrictions – together with the aforementioned (under 3) council's aims of preservation of the cooperative's jobs and of a maximisation of the average value-added per worker – mean that technical change has a very different role in comparison with capitalism. Whereas capitalist enterprises tend to use technical change as an instrument to squeeze out competitors, it is for cooperatives primarily an instrument for increasing their per worker value-added, leaving the production and jobs of competitors unaffected. In this respect the cooperatives' economic interaction tends to be non-aggressive and non-destructive regarding competitors. Comparatively this tends to result in less technical-change-intermittent joblessness; and to the extent that competitors' physical plants are not scrapped, less dwindling of environmental resources. (2§19 addendum.)

The restrictions mentioned under (5), together with other restrictions for cooperatives or their councils, are listed in *Table 2.8*.

TABLE 2.8 *Main requirements or restrictions for cooperatives and councils*

Foundation of cooperatives		
1	cooperatives are founded by workers; cooperatives shall not found cooperatives	2§4.0
2	foundation of cooperatives requires no funds of the workers	2§4.0
Cooperatives		
3	a founded cooperative shall not be sold; nor shall it convert its juridical status	2§3.0
4	take-overs are prohibited (implied by the previous point)	2§3.2
5	cooperatives are organised in no more than a single location	2§3.3
6	cooperatives pay at least the minimum wage (set by parliament)	2§8.0
7	a maximum labour-time duration per day, week and year applies (parliament sets)	2§8.1

35 All nationwide ceilings are indeed dependent on the size of a country. See further ch. 3, 3§45.

TABLE 2.8 *Main requirements or restrictions (cont.)*

Cooperatives		
8	cooperatives shall build up a legally binding resistance buffer, expressed as a percentage of the assets – 10% for COBs and on average 30% for other cooperatives; before meeting it, workers are paid no more than the minimum wage ^{36†}	2§7.0
9	in face of market dominance, the cooperatives' expansion is restricted	2§14.0
10	cooperatives shall register their incomes and expenditures, and annually record an 'Income account' and a 'Balance sheet'	2§11.0
Additional workers		
11	positions shall not be denied on ethnic, gender, social, political or religious grounds	2§3.4
12	any probation period for new workers is maximum two years	2§3.4
Cooperative banks, specifically		
13	besides servicing payments, COBs uniquely provide investment loans to PWCS [†]	2§6.4
Councils		
14	membership of councils is not bound to refundable or non-refundable dues	2§3.0
15	only the cooperative's workers can be members of its council	2§3.0
16	the council elects the management (removable) from its ranks	2§5.0
17	the council must approve of at least five key issues listed in 2§5.1, including the internal structure of the wages and dividend levels, and increases in investments or in the workforce, each beyond 5% of the past 5 years average	2§5.1
† COB: cooperative bank. PWC: all other cooperatives (production worker cooperatives; including services production).		

³⁶ On the percentages see further 3§13-l.

So far, it seems, there is a sensible alternative (TISA) to at least a capitalist economy. However, that is of little worth without a sensible design of state institutions accommodating that economy – and effectively as well as efficiently so, and at least as democratically organised as cooperatives. This is the subject of the next chapter.



Appendices chapter 2. Here follow two appendices. The first regards the Income accounts and the Balance sheets of cooperatives. The second regards the foundation of a cooperative bank.

Appendix 2A. Examples of Income accounts and Balance sheets for cooperatives

This appendix provides examples of the two required end of year statements of cooperatives: the Income account and the Balance sheet (referred to in 2§11.0). Those for production worker cooperatives (PWCS) are taken first, followed by those for cooperative banks (COBS). Note that in all of the income accounts, wages as well as dividends are an expenditure for the cooperative, but not *costs* as each of these are *aims* for the cooperative. (In capitalist enterprises, wages are costs.)

SHEETS 2A.1 *Income account and balance sheet for a production worker cooperative*

Income account pwc			
Expenditure		Income	
current material inputs	a	sales revenue	p
current external services inputs	b		
workers' wages	c		
<i>direct expenses (a to c)</i>	d	<i>gross operating surplus (p-d)</i>	q
depreciation fixed means of production [†]	e	<i>net operating surplus (q-e)</i>	r
interest to bank (COB)	f		
amortisation bank loan (COB)	g		
<i>total expenses (d to g)</i>	h	<i>disposable surplus (r-f-g)</i>	s
workers' current dividends	i	added to reserves (s-i-j)	t
workers' postponed dividends [‡]	j		
<i>Memorandum items[‡]</i>			
number of workers in FTE	k		
average wage and dividend per worker [*]	l		

† In case of rented premises, rent appears below item g.

‡ See 2§13.0.

* This information serves to determine the average remuneration of public sector workers.

* Regards items c, i and j.

Balance sheet pwc			
Assets		Liabilities	
premises		loan from bank (COB)	
fixed equipment			
input stocks			
work in progress			
output stocks			
commercial claims		commercial debts	
bank accounts (COB)			
<i>Total assets*</i>	A	<i>Total liabilities</i>	B
		legally binding buffer (30% A)	
		uncommitted reserves	
		<i>Total reserves</i>	A-B
* in estimated current value		<i>Liabilities + reserves</i>	A
<i>Memorandum item</i>			
List of workers' shares in the uncommitted reserves (attached)			

SHEETS 2A.2 *Income account and balance sheet for a cooperative bank (COB)*

Income account cob			
Expenditure		Income	
current material inputs	a	net interest income **	p
current external services inputs	b		
workers' wages	c		
<i>direct expenses (a to c)</i>	d	<i>gross operating surplus (p-d)</i>	q
depreciation non-financial fixed assets†	e	<i>net operating surplus (q-e)</i>	r
write-down on loans	f		
<i>total expenses and provisions (d to f)</i>	g	<i>disposable surplus (r-f)</i>	s
workers' current dividends	h	added to reserves (s-h-i)	t
workers' postponed dividends‡	i		
<i>Memorandum items‡</i>			
number of workers in FTE	j		
average wage and dividend per worker‡	k		

† In case of rented premises, rent appears below item f.

‡ See 2§13.o.

* This information serves to determine the average remuneration of public sector workers.

* Regards items c, h and i.

** Interest paid to Savings and Loans Bank, see 3§16-c, and interest received from PwCs (the interest on payment accounts is normally zero).

Balance sheet cob			
Assets		Liabilities	
<i>Non-financial assets*</i>	A	<i>Non-financial debts</i>	D
• premises			
• fixed equipment			
• commercial claims		• commercial debts	
<i>Financial assets*</i>	B	<i>Financial debts</i>	E
• clearing claim on CB [†]		• clearing debt to CB	
• investment loans: high security		• Loan from SLB [*]	
• investment loans: guaranteed [‡]		• PWC account holders	
• investment loans: low security		• household account holders	
• other loans to PWCs			
<i>Total assets (A+B)</i>	C	<i>Total liabilities (D+E)</i>	F
		legally binding buffer (10% C)	
		uncommitted reserves	
		<i>Total reserves</i>	C-F
* in estimated current value		<i>Liabilities + reserves</i>	C
<i>Memorandum item</i>			
List of workers' shares in the uncommitted reserves (attached)			

† Central Bank, see ch. 3, 3§13f.

‡ Guaranteed by the 'Investment-credit Guarantee Fund', see ch. 3, 3§15b-c.

* Savings and Loans Bank, see 3§16-c.

Because COBs cannot borrow in the form of bonds, and in face of the rule that savings must be stilled with the 'Savings and Loans Bank' (SLB), the loans from the latter (row 7 on the liabilities side) are a substitute for bonds and savings. For these loans the SLB requires an assignment of the collateral that the COB required for the investment loans.

Appendix 2B. Foundation of a cooperative bank

This appendix explains the process of the foundation of a cooperative bank (COB) by some of its (prospective) workers after the latter drew up a 'cooperative bank plan', referred to in 2§4.1. The state's *Guardian Bank* (GB, introduced in ch. 3, 3§14) may assist the foundation. As will be seen, the foundation of a bank is not a big problem; the problem is to get clients (this is similar for the foundation of a capitalist bank). For the success of the bank, it is essential that the founding (prospect) workers have a cooperative plan, the most important part of which is an amount of reasonable commitments by PWCs that they might likely bank with the COB once it is founded.³⁷ In case this cooperative plan is sound, the GB temporarily provides guarantees for the foundation (it will be seen below that it only in effect provides guarantees). The GB provides these temporarily, that is until the COB has been fully established.

The actual process of founding a COB involves three logical steps that are not fundamentally different from those of founding a capitalist bank.³⁸ The following two balance sheets show the results of the key bookkeeping acts for the foundation.

(a) *Foundation of a COB in terms of its balance sheet.* In 'bookkeeping act one' the COB provides a money-creating loan to the Guardian Bank. It results in *Sheet 2B.1*.

SHEET 2B.1 *COB founding balance sheet: money-creating loan to the Guardian Bank*

Balance sheet cob: day one 12:00 hrs			
Assets		Liabilities	
<i>Non-financial assets</i>	o	<i>Non-financial debts</i>	o
<i>Financial assets</i>		<i>Financial debts</i>	
• loan to Guardian Bank	€x	• current account Guardian Bank	€x
		<i>Reserves</i>	o

37 Such commitments might be likely in case PWCs are not happy with their current COB, or in case in a town or in (the district of) a region there is no COB as yet.

38 See Reuten 2019, pp. 167–70.

The point here is that by way of the loan of the COB in foundation to the Guardian Bank, the GB pays in no funds (at least no net funds).

In bookkeeping act two, the GB pays in from its account the initial reserves of the COB (*Sheet 2B.2*). This reveals the risk that the GB takes. Because in case the banking project is going to fail, it will be in debt with the COB for the amount of the loan €x. Thus the involvement of the GB boils down to the provision of a guarantee. (To keep the presentation simple, I omit any possible mutual interest agreements between the GB and the COB.)

SHEET 2B.2 COB founding balance sheet: initial reserves of the COB

Balance sheet cob: day one 12:01 hrs			
Assets		Liabilities	
<i>Non-financial assets</i>	o	<i>Non-financial debts</i>	o
<i>Financial assets</i>		<i>Financial debts</i>	
• loan to Guardian Bank	€x	• current account Guardian Bank	€o
		<i>Reserves (paid in by Guardian Bank)</i>	€x

Regarding capitalism, Lavoie remarks about a bank's own capital (equivalent to the reserves in Sheet 2B.2): 'The own capital of the bank constitutes a liability to itself. It represents the funds which the firm [the bank] owes to its owners [here the non-owning GB]. In general, the own funds [reserves] play a role similar to deposits that would be in the hands of the owners. ... The own funds [reserves] are an accounting entry, but in contrast to deposits they cannot be drawn on by the owners'.³⁹

(b) *Period of transition from founding of COB to its full establishment.* At this point (*Sheet 2B.2*) the COB has 100% reserves (the required reserves are 10% of the assets). It now rents its premises and uses some of the reserves to purchase assets. It starts its (further) banking by providing investment loans to PWCs. Given that the COB requires a legally binding reserves buffer of 10% of its assets, *the pace* at which it can provide loans depends on the sum that the GB paid in as reserves (*sheet 2B.2*).

In the course of time, and out of its disposable surplus, the COB gradually buys in the reserves provided by the GB (€x in balance sheet 2B2); the loans to

39 Lavoie 2003, p. 512.

the GB (€x) decrease at the same pace. In this transitional period an (abbreviated) balance sheet might look like *Sheet 2B.3*.

SHEET 2B.3 *COB balance sheet during its transition to full establishment*

Balance sheet cob			
Assets		Liabilities	
<i>Non-financial assets*</i>	A	<i>Non-financial debts</i>	D
• premises (rented in)	€0		
• fixed equipment			
• commercial claims		• commercial debts	
<i>Financial assets*</i>	B	<i>Financial debts</i>	E
• clearing claim on CB [†]		• clearing debt to CB	
• investment loans to PWCs		• Loan from SLB [‡]	
• loan to Guardian Bank (GB)	€½x	• account holders	
<i>Total assets (A+B)</i>	C	<i>Total liabilities (D+E)</i>	F
		legally binding buffer (10% of C)	
		uncommitted reserves	€0
		reserves paid in by GB	€½x
		<i>Total reserves</i>	C–F
* in estimated current value		<i>Liabilities + reserves</i>	C

† Central Bank, see ch. 3., 3§13 f.

‡ Savings and Loans Bank, see 3§16-c.

(c) *The COB as fully established.* Only when the COB has fully bought in the reserves provided by the GB (yet €½x in *Sheet 2B.3*) is it fully established such that it fully owns its assets. The COB balance sheet would then be as the one shown in Appendix 2A, *Sheets 2A.2*.

This concludes the Appendices of Chapter 2.