Valuing public land in land policy
The role of accountancy regulations

Korthals Altes, Willem K.

DOI
10.1016/j.landusepol.2024.107243

Publication date
2024

Document Version
Final published version

Published in
Land Use Policy

Land Use Policy 144 (2024) 107243

Contents lists available at ScienceDirect

Land Use Policy

journal homepage: www.elsevier.com/locate/landusepol

Valuing public land in land policy: The role of accountancy regulations

Willem K. Korthals Altes

TU Delft, Department Management in the Built Environment, Julianalaan 134, Delft 2628 BL, the Netherlands

ARTICLE INFO

Keywords:
Land development
Accountancy
Valuation
Netherlands

ABSTRACT

Land values change in planning processes. Accountancy regulations define the book value of land held by local authorities. This affects the evaluation of alternative lines of action in land development, and in this way, the land policy of local authorities. This paper reflects on the case of the Netherlands, which has a well-established tradition of public land development. Traditionally, valuation has been based on historic costs: the prices for acquisition and costs of infrastructure provision paid in the past, and not the current exchange values. Losses foreseen must be taken immediately; profits can only be booked after they have been made. This paper analyses the changes in these accountancy regulations over time and studies their impact on the economic position of local authorities. It considers both regulations as the outcomes of these as being found in administrative records and the practice in the City of Enschede where there was a difference between the official value as recorded in the books and the value that was the basis for decision-making. The paper discusses the impact on land policy. There is a tension between regulations that more-and-more aim for a direct reflection of property market volatility in the books and the aim of local authorities to present financial stability. This may contribute to less financial involvement in land policies.

1. Introduction

Monetary values play a role in planning. This paper studies how these monetary values are defined and discusses the impact of these definitions on land policies. It costs money to buy land and accountancy regulations matter as they define whether the value of the land can be balanced against its purchase costs. In some contexts of accountancy, buying land results in an immediate and total loss of the funds used to buy it, but in other contexts, the outcome may be financially neutral or it may be profitable if the current market value of the land is higher than its historic costs. Methods of bookkeeping may in this way affect land policy as they define whether alternative lines of action are costly or profitable at the time of decision making. Accountancy regulations create meaning regarding what is a monetary value in a specific societal context.

In planning there is an established tradition of studying the way planning contributes to the development of 'shared meanings' (Innes and Booher, 1999, p. 9). Planning processes define values in contexts of intersubjective interaction. Discussing values 'is a way of describing the sort of place we want to live in, or think we should live in' (Albrechts, 2004, p. 749). In contrast to these values in planning that are socially constructed, it is tempting to think about monetary values as hard and objective. However, just as other values in planning, monetary values are socially constructed and there are social practices that define monetary values (Vollmer, 2003). Valuations of public-sector organisations are different from valuations in the private sector (Grossi et al., 2023).

Alternative methods exist to define the value of land held by local authorities in the context of land development. These valuation methods play a role in the weighting of alternative land-development strategies. Studying this practice of valuation is important because land development is capital-intensive. Local authorities use a realm of value-capturing instruments to cover public investments and services related to land development (Canelas and Noring, 2022; McAllister, 2017; Vejchodská et al., 2022). Furthermore, values are dynamic in the context of planning and land development (Phelps and Miao, 2023). It is not only that urban land has generally a higher value than farmland, but also land prices are affected by processes of urban regeneration or programmes to realise affordable housing.

The practice of valuation is essentially about the social construction of values based on specific principles and guidelines. Practices of valuation change over time; they are part of a specific context of valuation. So, valuation is about constructing value to provide information relevant to a certain context, such as the context of evaluating the financial position of local authorities concerning their land development activities.

Land development is a 'multiple-value context' (Woestenburg et al.,

E-mail address: w.k.korthalsaltes@tudelft.nl.

https://doi.org/10.1016/j.landusepol.2024.107243
Received 8 June 2023; Received in revised form 15 May 2024; Accepted 11 June 2024
Available online 24 June 2024

2019b, p. 17) in which values are changing and shifting between different concepts of value. Such a context requires a regular evaluation of the values. Financial expectations play a role in decision-making as they affect the reasoning behind land development strategies. In the context of land development values are not given but are changing, not only based on risks and uncertainties involved, but also related to changing planning regulations. Lifting land use regulations may result in extra value (McAllister et al., 2022). Specific to the context of public land development is that public authorities are accountable to the people of their constituency (Kang and Korthals Altes, 2015). Councils, as people representatives, have a final say in budgeting (Woestenburg et al., 2019a).

Most of the research on this topic is more focused on the financial outcomes of land development (Korthals Altes, 2010; Paulsen, 2014) than on the definition of value. Woestenburg et al. (2018) indicate that municipalities 'must follow strict accountancy rules' (2018, p. 802), showing their relevance, but do not provide much information on what these rules are. In a more specific account of local practices about a 'balance-sheet reform' Savini (2016, p. 868) provides an analysis showing the relevance of changing practices of accountancy but is more interested in the 'neoliberal logics' behind it than in the accountancy mechanisms themselves, which are a lot older than neoliberalism: the City of Amsterdam has used the method of double bookkeeping between 1663 and 1811 (Oldewelt, 1971). Bradley (2020), (2021) analyses how land in a certain context has become a financial asset but does so only in the policy context of reserving sufficient land for housing supply. Murray (2020) shows how the asset value of land has an impact on private investment behaviour. Furthermore, Murray and Gordon (2023), discuss that planning authorities must take the effects of rezoning on private investment behaviour into account. Paulsen (2014) is interested in the fiscal impacts of land development and the way these can be foreseen by accountancy practices. This fits a line of research studying the effects of urban sprawl on the financing of service provision (Gielen et al., 2019). All in all, the impact of accountancy regulations on the financial position of planning authorities and the way this may impact land development decisions is acknowledged by literature but is under-researched. The current paper will address this issue.

In the next section (Section 2), an introduction will be provided to accountancy systems and discussions to achieve a more coordinated system within the context of the European Union. This is followed by a short Section (3) on the methods used in the case study of municipal land development in the Netherlands. The case study (Section 4) consists of three parts, a presentation of changes in accountancy regulations and guidelines (4.1), an overview of outcomes of this at the level of all municipalities together (4.2), and an account at the level of a single municipality, the City of Enschede (4.3). There is a long tradition of land development in the Netherlands and there have been several changes in accountancy regulations for municipalities and guidelines on how land policy should be covered in the municipal accounts providing insight into the impact of changes in these changes on the financial position of local authorities. The outcomes are discussed in the context of a wider potential for application and future developments (Section 5).

2. Accountancy systems in the context of public land development

There are two major types of accountancy systems for authorities (Giosi, 2020). The first type is based on cash flows and the second type is accrual accountancy based on transactions, which result in assets and liabilities. Currently, many local authorities follow accrual accounting principles (Arnaboldi and Lapsley, 2009; Azhar et al., 2022). In some cases, it is only 'partial accrual accounting' (Barton, 2005, p. 212), which means that the authorities record transactions but do not have a balance sheet of assets and liabilities. Such a partial system, just like a cash-flow system, does not provide insight into the value of multi-year investments such as in land development. It does not facilitate an investment logic in which costs are made to result in future revenues, which therefore are translated into a book value.

In the first type, a *cash-flow system*, a yearly overview is made of money spent and received. If for example in year 1 a payment of € 5 million is made to buy land, this is accounted for as spending of € 5 million in year 1. If in year 5 this land is sold for again € 5 million, it is seen as an income of € 5 million in year 5. This land, although owned by the government, does not appear in the accounts in the years 2, 3, and 4 as no transactions take place. In this system, no valuation of land takes place for accountancy reasons (Deakin, 1999). This system is not very well suited to give insight into the economic position of the local authority (Giosi, 2020). An example is the discussion on alternatives for gap funding for urban regeneration in the UK after this system has been considered to provide incompatible state aid by the European Commission (Korthals Altes, 2006). The alternative of 'direct development' (buying derelict land and properties, servicing the lands, and selling plots to development companies) was considered to be 'three times as expensive' (TLGRC, 2002, p. 13) as financing the deficit of a development company. This was so because buying land resulted in a large negative cash flow and the returns that could be received by selling the lands to a development company were no part of the equation. There was no balance sheet to record the land value as an asset, which would reduce the ultimate cost to the public purse to the deficit foreseen. The way the accountancy system was set up has an impact on the feasibility of alternative land-policy options. In this example, the alternative was not feasible because it did not fit the practice of accountancy.

This impact on policies of specific accountancy regulations is more extensively studied as part of the budgetary requirements of the European Monetary Union (EMU). In the EMU, dates of transactions are used to determine whether its member states fit the budgetary requirements of a 3 % deficit norm as formulated in the Stability and Growth Pact (Vallés and Zárate, 2007). By delaying transactions, current budget deficits can be lowered. This is one of the main drivers behind 'Public Private Partnerships' as a form of 'creative accounting' to make investments now and pay later without letting it count for this 3 % rule (Benito et al., 2008).

The second type of *accrual accountancy* is not about recording the actual payments but it is a double bookkeeping system that not only records transactions (leading to revenues earned and expenditures incurred) but also the values of assets and liabilities, which values may change without any transactions (Giosi, 2020). Accrual-accounting principles enable long-term investments, such as in infrastructure for transport and utilities, municipal housing, or land development (Korthals Altes, 2010). Furthermore, accrual accountancy allows reserving assets for future spending, and it may oblige to set aside provisions for liabilities that may result in losses. In the context of land development, the values of assets and liabilities can develop volatile; land value increases are uncertain. This uncertainty is fed by the fact that land value is often seen as a residual value resulting from developments in both property and construction markets (compare RICS, 2021). Accrual accountancy is more complex than cash-flow accountancy as it needs a revaluation of assets and liabilities, which is not necessary if only cash flows (or transactions in a partial accrual accounting system) are measured.

Within accrual accounting, there has been, for decades, a watershed between Anglo-Saxon accountancy practices in which assets are reported based on current values and accountancy practices of continental Europe in which book values are based on historic costs (Palea, 2017). Wigger and Nölke (2007) and Palea (2015) explain that these differences relate to variances in economic structure. In continental Europe, and more specifically, in the German context of the Rhenish model of capitalism (Palea, 2015; Wigger and Nölke, 2007), the economic structure is built on long-term relationships between firms and companies which hold block holdings in companies for many years, resulting in that accountancy regulations have been more centred on the value of holding an asset. In an Anglo-Saxon context, the value of assets has been more centred around the value of selling an asset, which fits better the local economic structure.

The *Letwin Review of Build-Out Rates* (Letwin, 2018) recently highlighted the relevance of value definitions for planning in the UK (Korthals Altes, 2019). The yearly appraisal of land portfolios of companies based on the residual value of development explains slow construction on locations legally fit for home production as 'the house building company is not inclined to build more homes of a given type in any given year on that site than can be sold by the company at that value' (Letwin, 2018, pp. 13–14), which shows that valuation practices can have impact on land development and also that they prevent building in such an amount that (massive) supply results in lower prices.

Anglo-Saxon and Rhenish systems have common principles such as the principle of prudence (Adam et al., 2022; Ionescu et al., 2016; Maltby, 2000), which is currently under debate. Prudence involves that negative expectations need to be booked as soon as they can be foreseen, i.e., they result immediately in a liability or a reduction of the value of an asset, and future profits cannot be added to current assets as soon as they are foreseen, but only after they have been realised. This 'asymmetric prudence' (Lorson and Haustein, 2019, p. 389) is criticized because it would mean that accounting is not neutral to positive and negative expectations. Alternatively, prudence may be a necessity to meet the principle of neutrality as a counterforce to the 'natural optimistic management bias' (Lorson and Haustein, 2019, p. 389) about the future. The debate on balancing the principles of prudence and neutrality is ongoing and may result in different outcomes, resulting in differences in specific accountancy regulations.

Value development is substantial In the context of land development. The boom and bust cycles of real estate development show that overconfidence is an apparent (Lind, 2009) or even endemic (Bell et al., 2022) phenomenon. Expectations of value development, i.e., what will be the value of the properties after they have been developed, are essential, as these future expectations define the values of today. So rules matter concerning the current value and the trajectories by which potential future values may flow towards current values.

Government accountancy rules serve another goal than accountancy rules for companies (Giosi, 2020). Local authorities are not for sale. There is no need for a valuation to provide shareholders with a valuation of their option to sell it. Furthermore, a local government has also public ways to acquire extra funding, for example, by raising tax rates, which private companies do not have. The relationships between the executive, the council, and the inhabitants differ from the relationships between private management and shareholders. A municipal council meeting has a much larger say than the meeting of shareholders in a company. Furthermore, councils define the local public interest. The local public interest is not about making money, but about the territorial organisation and it is about providing services to inhabitants and organisations. Local authorities tend to aim to present a financial result just above zero (Cohen et al., 2019; Ferreira et al., 2013). Financial stability contributes to re-election rates (Bradbury and Scott, 2015). Local politicians prefer not to present large losses, nor excessive profits and are prepared to achieve this by 'earnings management' (Ferreira et al., 2013), which involves using discretionary space in accounting to reach a desired outcome: a stable, just above zero, result. An additional difference between authorities and companies is that authorities serve the community by defining and enforcing regulations. So, even when local authorities use accrual systems of accountancy, valuation practices will deviate from private sector valuation. This involves that specific accountancy rules apply to local authorities that are deviant from those that apply to businesses (Giosi, 2020) and relate to the tasks of local authorities.

3. Methods

There is a long tradition of land development by local authorities in the Netherlands. To grasp the development of the accountancy regulations (presented in Section 4.1), secondary literature is used in the form of papers published in an accountancy journal, the *Maandblad voor Accountancy en Bedrijfseconomie*, which has been published since 1924 and its first issue already included an article on accountancy for local authorities (Hartmann, 1924). Although minor changes in accountancy regulations happen almost every year, there are fewer systemic updates (Table 1).

This paper takes a specific guideline, in force from 1995 (CV1995, 1994), as a starting point. The year 1995 was also the starting point for the national housebuilding and spatial development programme known as VINEX (the Dutch acronym of the Fourth national report on spatial planning Extra) (Kruythoff and Teule, 1997). Therefore, this system has been used widely for market-driven housing development in the Netherlands (Zonneveld and Evers, 2014). In this way, the paper reflects on the specific regulations developed for accountancy of local authorities since 1995 and its interpretation in the context of land development. Changes presented include the new regulations, based on a municipal reform (BBV, 2003), and specific, systemically more minor but for land policy highly relevant, changes in guidelines drafted as a response to the Global Financial Crisis (Commissie BBV, 2016) and a more recent update to these (Commissie BBV, 2019).

In the second step (Section 4.2), the outcomes of the practices of accountancy are studied based on financial data of yearly accounts published by Netherlands Statistics (also known as CBS) (CBS, 2016; Statline IV3, 2022). This specific data source is not subject to a quality check by CBS, which publishes the data as they receive it from local authorities. The yearly accounts, as are uploaded to the portal, are also used by the provinces (Budding and Ormel, 2018), who, furthermore, use the formal yearly accounts which provide textual information, including a review letter by the accountant, to oversee municipal finances. For the provincial authorities overseeing the economic resilience of local authorities is key. This is also of eminent importance for the council to monitor the financial position of the local authority.

In the third step (Section 4.3), an example from practice, the city of Enschede, will be used to study the impact of valuation principles on the financial position of local authorities working in land development. This is based on a report for a council inquiry on land development (Korthals Altes et al., 2012). During a council inquiry, researchers get full access to confidential materials (Gemeente Enschede, 2019, 2022, 2023). This allows us to study the wider argumentation relating to the creation of values beyond what is recorded in the books.

Table 1
Timeline with main regulatory changes relevant to accounting of municipal land policy.

Year	Development	Source
1851	Municipal law provides equal rules for all municipalities	Gemeentewet (1851)
1909	Municipal law allows to manage capital for municipal companies, including land development agencies, separately from the rest of the municipal accounts	Eerste Kamer (1909)
1931	Municipal law allows a full split of the accounts between municipal companies (such as the land development agency) and the normal operation of the municipality	Textor (1935a)
1985	Introduction of accrual-based accountancy for the whole municipality	Faber et al. (1989)
1996	New accountancy regulations based on a new municipal law	CV(1995) (1994)
2003	Introduction of dualism between Council and Executive with a new system of accountability	BBV (2003)
2016	New specific guidelines for land development agencies (based on relatively minor changes of BBV)	Commissie BBV (2016)
2019	Renewal of guidelines: specific decision-making by the council allows for some exemptions to stringent rules	Commissie BBV (2019)

4. Accounting for land development in the Netherlands

4.1. Development of accountancy regulations

Municipalities in the Netherlands are legally obliged to show a balanced budget without a deficit. This requirement prompted local authorities over a century ago (Siblesz, 1925) to place many activities that need capital expenditure, such as utility companies, public works agencies, housing companies, and land development agencies, outside the main accounts, also known as 'the regular service', of the local authorities, but account for them as specific 'branch of service' (*tak van dienst*) using accrual accounting principles. Although in this way, it has been assured that investment in land acquisition and improvement could be done and loans and interest could be set aside from the normal municipal cash flows, debates continued on the investments in land development infrastructure as a framework for value assessment was missing (Textor, 1935a). Assessment of these values was considered to be both key and complex (Siblesz, 1925; Textor, 1935b). The issue of a downturn in values as happened in the 1930s has indicated that it was essential to have a substantial reserve (Textor, 1935b).

For decades, the 'regular service' based on cash flows for normal operations of the municipality existed side-by-side with specific 'branches of service' based on accrual accounting for municipal companies and other investment-rich activities (Table 1). Although formerly the regular services also used a transaction-based, accrual accountancy system from 1985 (Bonnema, 2004; Faber et al., 1989), the connection between those two ways of accounting was not always going smoothly nor was very insightful (Faber et al., 1989). The capital expenditure sectors in the local authority were black boxes and only the result of what happened in this black box was generally seen by the central municipal financial accounts, even after they both used formally an accrual-based system.

Siblesz (1925) distinguishes 3 stages of land development relevant to accounting. Firstly, the stage of land still in agricultural use that local authorities buy with development in mind. Secondly, land that is undergoing a process of transformation and for which the municipality is making costs to serve construction and, thirdly, finished sites disposed in the form of ground leases but owned by the local authorities. For the first stage, Siblesz (1925) considered that it was unclear whether the land would have a higher value than the agricultural value and suggested that only appraisal could establish whether it was justified to add costs as interest to the value of this land. In this first stage land usually keeps its original function resulting in (farm) rent. For the second stage, appraisal is even more key. On the one hand, there is often no farm rent as in the first stage and there are more costs for servicing the land, such as the construction of roads, sewage systems, and water systems and extensive ground works necessary to prepare peatlands for building (Needham, 1992), but on the other hand, there is potential to achieve higher development values. For the third stage, Siblesz indicated that a specific way of accounting separate from the other land may be more fitting considering the difference in financial context. This distinction in these three stages still exists today. The focus of this article will be on the second stage.

For this second stage, a land development project, the municipal council opens (usually it approves a proposal of the executive) a land development 'complex', which is a spatial development plan with a financial interpretation, which is currently defined as follows.

> 'The land development complex contains the land development financial plan including at least (a) a map of the land development complex, (b) a description of the building plots, the designated land uses and permitted building volumes, the description of the infrastructure works and activities to service the land development complex, the construction of utilities and the layout of the public space in the land development complex, and (c) a land development budget.' (Commissie BBV, 2019, 34: translation by authors)

This complex provides insights into expected expenditures and revenues over time and is a framework for the assessment of the land values within the complex. In this way, another legal requirement was met, i.e., according to municipal law the council had to approve the acquisition of land. By a decision on such a complex, this decision is made. The council approves land acquisition and sets a budget.

The decision to open such a complex is not in the public domain as it is usually taken in a confidential council meeting to protect the market interests of the local authority. Insights into financial budgets by everyone would damage the negotiating position of the council with landowners and construction companies and may provide information on tenders of private contracts (Korthals Altes et al., 2012). The law allows so. However, some information must be provided in the yearly accounts as there is a relationship between expenditure and revenues, assets and liabilities inside the municipal complexes, and the financial position of the local authority. In the next session, first, the 1995 system will be analysed to explain the differences with the current system.

The central government decree *Besluit comptabiliteitsvoorschriften 1995* (Decree on accounting regulations: CV1995) obliged to publish an account of the investments done in current complexes in a publicly available overview (with an explanation of major developments) with the yearly accounts. Furthermore, CV(1995) (1994) prescribed that historical costs were key in accounting in such a complex. All costs made must be added to the book value of the land.

According to CV1995, there are some differences in the regulations of accrual accounting for business as regulated in the Civil Code (Bac, 2002). Local government works by other principles and aims than the business sector. A significant difference relates to the way interest is handled. Local authorities can always attribute interest to investments without considering whether investment is financed by debt or equity. After all, financial gain for shareholders is no aim of governments, but it is about accounting for government services. This means in practice that interest in land development projects is a calculation of the 'rent' a land development agency must 'pay' to the treasury of the local authority. It is not the actual rent paid to the bank. The treasury, not the land development agency, administers bank loans. This means also that local authorities usually do not use individual land accounts to get a loan from the bank, but it is part of the total portfolio, which the bank reviews to establish the exposure of the local authority to real estate risk.

The specific position of a local authority explains valuation based on historical costs. Actual value accounting provides insight into the solvability of businesses. However, for Dutch local authorities, there is a bail-out policy, which makes this not necessary (Allers, 2015). Since the municipal law of 1851 (Gemeentewet, 1851) established uniform municipalities, no municipality has gone bankrupt. The BNG Bank for local authorities has 90 % of its loan portfolio in loans 'granted to or guaranteed by public authorities' (BNG, 2023, p. 73). According to its annual report: 'These loans are not subject to solvency requirements and have a risk weighting of 0 %' (BNG, 2023, p. 73). So, even in the Global Financial Crisis no lending disaster happened, and Dutch local authorities have still access to risk-free loan rates.

A principal issue in CV1995 has been the moment for taking profit. CV(1995) (1994) did oblige local authorities to take account of the 'silent reserves' between land production costs and current values based on expected future incomes, to provide insight into the economic position of the local authority. Although it was clear that local authorities could only record a profit after the profit had been realised, it was malleable at what moment this would be. The idea was that municipalities could take the profits at the closure of a complex; after land development was finalised. However, in practice executives played without clear guidelines from the council with interim profit takings. This allowed them to find funds at a convenient moment, for example, to make the council decide on a new investment. Critics considered this as not in line with the council's right to budget (Rekenkamer Amsterdam, 2006). The Court of Auditors of Amsterdam found that much more profits have been captured by incremental interim profit takings than at the closure of land development projects (Rekenkamer Amsterdam, 2006). An example is the Mahler project in the Zuidas area where € 100 million could be captured at a moment that fits budgetary needs (Rekenkamer Amsterdam, 2006). Such a round figure of € 100 million is very unlikely the outcome of bottom-up financial development but is a signal for the construction of value by political processes.

The regulations of CV1995 have changed over time. Most fundamentally this happened as part of a municipal reform resulting in the transfer from a monist to a dualist system of governance (De Vries, 2008). In the monist system, the alderpersons were members of the council, in the current dualist system, members of the executive are no longer members of the council resulting in a further separation of powers.

This separation of executive and council has gone hand in hand with an update of the rules and regulations on financial management. The analysis of financial resilience has replaced the presentation of silent reserves. The BBV (*Besluit begroting en verantwoording*) (BBV, 2003) has replaced CV1995, and is, although it has been updated 14 times in 2 decades, still in force. The idea behind introducing a dualist system was that the boundary-setting role of the council should become more important. However, De Vries (2008) argues that it did not work out this way (see also Tillema and ter Bogt, 2016).

The first major test of the new system was the Global Financial Crisis in 2008, which had not only a large impact on land development (O'Brien et al., 2020; Van der Krabben and Jacobs, 2013) but also brought some issues in financial accounting at light (Overmans, 2017; Vos and Scholte, 2012). The response resulted in more stringent accountancy rules and specific interpretations of these rules for the field of land development by the Commissie BBV (2016), a committee founded to ensure 'unambiguous implementation and application' (BBV, 2003, article 75) of the BBV by presenting guidelines and by publishing guiding answers on questions. One of the 'specials' they have developed is a note on land development (Commissie BBV, 2016, 2019). Many of these changes took effect in the reporting year of 2017. Based on a rather minor change BBV a new note on land development (Commissie BBV, 2016) launched three relevant changes.

First, land that is bought without a complex is opened – so, the first type of land as distinguished by Siblesz (1925) – cannot be in the books for more than its current use value and cannot be presented as part of the land development process (Commissie BBV, 2016).

A second important change is that income that is expected to be received over the long term cannot be incorporated into the books. So, for these incomes, there must be a provision, which results in an immediate loss. The executive cannot use future expected income from one complex to compensate for a shortage of another complex. A definition of a complex is the authority of the Council which has the power to open one.

A third change is that the realisation of profits must follow the percentage-of-completion method. So, the liberty that executives took to play with intermediate takings of property is lost and there are clear guidelines on how profits must be booked.

A later note (Commissie BBV, 2019) has softened these changes. The Council can under certain conditions make an exception.

Changing these rules had a considerable impact on the value of the land development portfolio. Land acquisitions before the council has decided on a specific plan with a financial account with it, have lost their development value, long-term uncertain incomes cannot be taken into account yet and realised profits cannot be kept as a silent reserve or resilience assets, that is, outside the formal books, to be used by the executive if they need some extra money, but there are formal proceedings about how equity is formed. This may happen at times that do not fit the executive. The Association of Land development Agencies (*Vereniging van Grondbedrijven*) (VVG, 2023) has criticised this new system as it creates volatility in financial results caused by conjunctural changes, and they propose to postpone the taking of profits to prevent this.

These changes fit the idea behind the transformation from monism to dualism, i.e., the separation of the council and the executive, which involves that the council has a boundary-setting role, that the executive operates within these boundaries, and that it is accountable to the council.

4.2. Financial outcomes measured by these regulations

The next step in the analysis is to provide an overview of the development of local authorities' finances, as they are measured by these value definitions. In an accrual accounting system, there are two main ways to study these, that is the overview of revenues and expenditures (Table 2) and the balance sheets (Fig. 1). Measuring revenues and expenditures in systems of accrual accounting is more than only recording direct revenues and expenditures, but also includes, i.e., the outcomes of recalculations and depreciation of the value of assets and liabilities. These valuations are constructed based on accountancy rules and regulations.

Table 2 shows the importance of recalculations and depreciation for the financial performance of local authorities on municipal land development.[1] In the years after the Global Financial Crisis local authorities had financial issues in land development, resulting in a financial deficit of over one billion euros in 2012. However, the direct revenues, the outcome of transaction-based revenues minus expenses, have been positive (Table 2). This results from the large investments in land portfolios in the years before the Global Financial Crisis. In 2010 the value of these assets was € 13 billion in 2010 (Fig. 1). Many local authorities have had, certainly in hindsight, paid too much for a too large land portfolio. This resulted in depreciation, usually by taking provisions, which means that assets (reserves) are transported to liabilities (provisions).

In a few municipalities such as Apeldoorn (Van Loon et al., 2019), the outcomes were very negative, in most municipalities results were more manageable. Provisions for losses were set aside and land development spending was economised. As some sales were going on, although at a lower level than expected, the balance of direct revenues and expenditures could stay positive but there was a negative balance due to recalculations and depreciation (Table 2). Local authorities did not have many alternatives to economisation. After all, the Global Financial Crisis was not limited to the land development agencies alone and had a broader impact on the municipal financial situation (Overmans, 2017).

Many local authorities decided to refrain from direct development, at least in principle. Practice was a little different (van Oosten et al., 2018). Local authorities used the large land portfolios they owned for land development. However, the net effect was that local authorities sold more land than they bought resulting in a depreciation of land portfolios from € 13 billion to € 5.1 billion (Fig. 1). The sum of land bought in 2021 was € 220 million. This is considerably lower than in 2010: € 860 million (Table 2). Note that these figures are nominal. Due to inflation, the value of the euro in 2010 was about 20 % higher than in 2021 (CBS, 2023b).

4.3. A case from practice

The practice of accounting in the context of financial decision-making may reveal differences between values as defined by formal accountancy regulations and values that are used for political decision-making. Although the formal accounts as presented in the books may show all required figures, the emphasis on political discussions and communication can be different. A case in point here is the City of

[1] The impact of the BBV changes of 2016 on recalculation and depreciation appears to be significant if only 2016 is compared to 2017. However, a comparison of 2018 with 2016 suggests that the year 2017 is an outlier and there is less impact measured over a longer period (Table 2).

Table 2
Financial results in € millions (nominal) of land development by local authorities in the Netherlands.

		Based on BBV							Based on BBV changes of 2016				
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenues	Interest	157	122	116	127	77	66	34	16	19	19	11	10
	Rent	228	271	300	237	215	279	235	227	380	344	315	314
	Land sales	1943	1896	1959	1435	1641	1798	2036	2062	2572	2408	2434	2355
	Sales of durable goods and services	240	228	537	217	180	213	170	169	135	123	166	164
	Other goods and services	476	527	409	598	254	304	502	120	237	304	295	287
	Contributions	630	439	416	409	272	195	181	179	176	139	168	165
	Total direct revenues	3693	3487	3737	3025	2641	2855	3158	2773	3517	3337	3389	3295
	Recalculations and depreciation	2921	3167	3675	2913	2713	2692	1678	256	1582	947	1039	1035
	Total revenues	6614	6654	7413	5938	5354	5547	4836	3029	5099	4284	4428	4330
Expenditures	Interest	207	111	220	258	222	170	136	263	229	203	167	165
	Buying land	860	602	756	447	494	287	291	147	248	226	228	220
	Durable goods buying and commissioning	1499	1432	1822	1156	955	746	778	671	834	884	882	864
	Other purchases and outsourcing	546	421	372	268	269	220	278	376	343	422	401	398
	Taxes, energy, planning, personnel, other	171	141	131	211	171	154	179	207	338	332	390	386
	Contributions	222	210	221	179	118	96	63	45	74	43	50	50
	Total direct expenditures	3504	2917	3522	2519	2230	1673	1725	1708	2067	2110	2118	2083
	Recalculation and depreciation	3862	4606	5032	3548	3564	3319	2721	279	2158	1533	1401	1351
	Total expenditures	7365	7523	8554	6067	5793	4992	4446	1987	4225	3643	3519	3434
Balance	Balance direct revenues and expenditures	189	570	215	506	411	1182	1433	1065	1450	1227	1271	1212
	Balance recalculations and depreciation	-941	-1439	-1356	-635	-850	-627	-1042	-23	-576	-586	-362	-316
	Total balance	-751	-869	-1141	-129	-439	555	390	1042	874	641	909	896

Source: author, based on IV3 data of local authorities as been collected by CBS (Statline IV3, 2022)

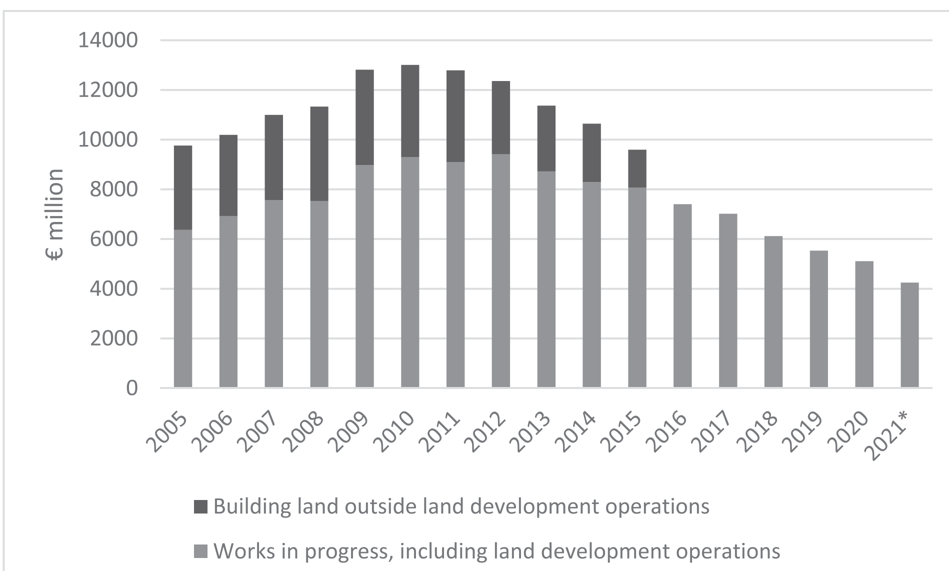

Fig. 1. Value of land development assets according to Municipal accounts. Source: author based on CBS (2022).

Enschede (161,235 inhabitants (CBS, 2023a)) in which a council inquiry into the land portfolio (Gemeente Enschede, 2012; Korthals Altes et al., 2012) revealed that the figures of assets and liabilities from the financial accounts played a role (they were somewhere printed in the books), but that the bold figure under the line made to communicate to the council as the most important outcome, was the figure of the so-called 'virtual earmarked funds'. Formally these funds did not belong to the assets of the local authority. The funds consisted of profits expected to be realised in the future, and although, based on the principle of prudence they were not part of the formal assets of the local authority, they were part of the politically defined assets of the land development agency. In a time of the Global Financial Crisis, the future developed differently than expected and so these funds did not materialise. Although these virtual funds were not part of the formal assets, they were formally part of the figures to be published in the accounts. Just as in CV(1995) (1994) which defined the obligation to publish silent reserves, there was an obligation to report on resilience assets in the BBV (BBV, 2003). These virtual earmarked funds have been presented as part of the report on resilience assets of the local authority. The fact that for land development projects a positive result is expected leads to financial resilience and Dutch accountancy regulations require local authorities to take account of these and to present these to the council. This reveals that there can be a gap between formal financial values, the financial values constructed according to accountancy rules, the alternative to the barrels of gold in the safe, and the political financial values, the values that drive political decision-making, which include an optimism bias. So even in years that the reserves have been negative (Fig. 2), texts from the Executive to the Council spoke of a financial 'healthy' land development agency (Gemeente Enschede, 2012). Furthermore, even in years with a negative reserve, between 2007 and 2011, there has been yearly creaming of funds from the land policy reserve to the central municipal reserve as if there were profits to share (Gemeente Enschede, 2012). It must be noted that the municipality had conservative rules for the taking of profits: the introduction of the percentage-of-completion method

Fig. 2. Land policy reserve in Enschede. Source: Gemeente Enschede (2012), (2023).

resulted in a positive effect of € 8.6 million on this reserve in 2017 (Gemeente Enschede, 2018). This effect shows that equity is a social construction.

Two years earlier, other parts if these regulations (regarding the valuation of land development investments) resulted in a € 4.3 million deficit (Gemeente Enschede, 2016a, 2016b). This contributed in 2016 to the decision that there was no financial capacity to reserve funds to finance new urban ambitions. Improving the financial conditions of current plans had priority.

After this council inquiry, matters changed gradually, and currently, the resilience assets do not include 'silent reserves', profits expected based on works in progress (Gemeente Enschede, 2019, 2022). This development has been quite recent as in 2020 the silent reserves were still reported as part of the resilience assets (Gemeente Enschede, 2021). Significant for considering the future outcomes of land development is the way different 'parameters' (Gemeente Enschede, 2021) are set, such as, for the development of expenditures (including engineering costs), development of revenues (how do land prices develop for different types of property) and interest. The parameters distinguish between short-term and long-term developments. These parameters are the accounting basis. A more negative estimation of these parameters may result directly in a loss if this means that plans with a foreseen shortage have a more negative outlook and it may result in a positive outlook if provisions for these negative result plans must be lifted. The definition of the parameters has a direct impact on the assets and liabilities of the local authority (Korthals Altes et al., 2012). Setting these parameters plays a role in constructing the value of land development and is part of the craft of financial officers at the land department to construct a financial outlook of a land development project. This is also important as new land development complexes can only be opened if the land policy reserve allows to cover this shortage by taking a provision out of the reserve (Gemeente Enschede, 2019). Furthermore, the financial resilience capacity of the municipality must be large enough to cover the risks, which also includes the idea that the reserve must at least be 30 % of all foreseen expenses in running projects. The specific construction of values constrains the possibilities of the City of Enschede to engage in new projects. Part of the lessons learned by the City of Enschede is to discuss the values of the parameters explicitly in the accounts.

5. Discussion and conclusion

Value is a social construction. Valuation takes place in a specific context and this context defines what kind of valuation is of use. Public land development by local authorities is a context in which a local authority invests in the land to produce plots for the development of properties that fit a policy aim developed by the authorities. The valuation's main aim is to have insight into the effect the land development project has on the financial situation of the local authority. Furthermore, it contributes to developing land development policies themselves: how to weigh different alternative land development options and strategies. The rules define whether the costs of buying land or the provision of infrastructure to these lands are countered by a growth of the value of the land. As there may be specific rules on local authorities relating to the deficits they may have on their accounts, having the possibility to balance investment costs by the current value of future revenues, may make a difference in the ability to operate on the land market at all. The way local authorities craft these accounts of value depends on the context.

In the Netherlands, for example, local authorities must show a balanced budget. This means that large investments do not fit well into a system that does not allow to account for the valuation of the current value of future revenues, and very early on systems have emerged that allow for accounting in a business way manner for municipal 'companies', such as the land development agency. In other contexts, there is a debt ceiling for local authorities (Geheb, 2009). This results in that accountancy tricks are sought and found to develop a practice that may fit the rules; this practice may, however, not be the most efficient overall.

Analysis of accounting for land development in the Netherlands showed that there is a continuity in separating accountancy into three stages, firstly, before the adoption of a land development plan, secondly, within the context of a land development plan approved by the council and, thirdly, management of lands and properties as development has been realised. In the second stage, the land development plan becomes the unit for valuation. It is within the boundaries of this plan that provisions must be taken if losses are foreseen. Furthermore, there has been development in regulations on the way profits from development can be taken. Whereas up to recently municipalities were free to have their own polices as long as they fit the principle of taking profits only after they have been made, resulting in that an Executive could hide, seek, and find profits at the moment they found politically handy, more stringent regulation nowadays prescribe a percentage-of-completion method of taking profits providing so less flexibility to the Executive and more power to the Council in deciding on financial matters. The new regulations result in more volatility as profits are earlier taken based on a fixed rule (VVG, 2023). Better performance of conjunctural effects in the books has the consequence that more often financial results will deviate from the just-above-zero benchmark, which might lead to less uptake of, inherently risky, land policies by local authorities as financial volatility affects the image of managerial competence and may reduce the change of re-election (Bradbury and Scott, 2015; Cohen et al., 2019; Ferreira et al., 2013).

The case of Enschede shows that although regulations can prescribe that certain figures are key, other figures may be printed in bold and could be presented in the explanation as main outcomes in reports of the Executive to the Council. The building of the narrative of a financially healthy land development agency, even in the context of a formal negative reserve, in other words, the liabilities were exceeding the assets, shows that the local construction of value can be more important than the official one. In this case, the silent reserves of potential income from profitable land development projects played a key- role, which proved in the context of the aftermath of the Global Financial Crisis to be a risky way of seeing the economic situation of the municipality. After all, there can be an optimism bias in the eyes of proponents of municipal land development projects. It also shows that the financial data constrains the possibilities to engage in new projects. This holds most directly for projects which need a provision to cover for a shortage foreseen, but it holds also for other projects as resilience capacity must be large enough to cover for the risks.

Accounting practices relate to the role local authorities have. The roles of local authorities relating to land use are changing, i.e., there are large challenges for authorities relating to land use. These include the development of policies to contain urban development by a full stop on the use of rural land for urban uses (Gradinaru et al., 2023), the challenge to develop areas that are less dependent on the use of fossil fuels to combat climate change, the development of areas that give room to biodiversity development and an agenda for spatial equity, or more general the sustainable development goals (United Nations, 2022). These challenges render that new ways of land development are on the agenda that urge to be involved in land development by taking the initiative for change. In a context beyond feudalism, landowners cannot be forced to invest to address this agenda just based on them being the holders of a property right. However, authorities may feel that they cannot afford to wait and see how others take the initiative to respond to these challenges. In this context the values of land have next to an economic value also a value to address these challenges and in public debate these matters must be weighed sensibly.

One of the ways to do so is that the long-term marketisation of land development will bounce back to a larger role of authorities in developing land to accommodate functions that fit these challenges. This paper shows that accounting for taking this role is complex and may develop over time. The value of land development projects in the practice of public land development is context-dependent and relates also to the position of local authorities in the system of governance.

CRediT authorship contribution statement

Willem K. Korthals Altes: Writing – review & editing, Writing – original draft, Visualization, Methodology, Data curation, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data uses is from public sources and is referred to in the list of references.

References

Adam, B., Heiling, J., Meglitsch, T., 2022. The principle of prudence in public sector accounting—a comparative analysis of cautious and asymmetric prudence. Public Money Manag. *42* (7), 521–529. https://doi.org/10.1080/09540962.2022.2074084.

Albrechts, L., 2004. Strategic (spatial) planning reexamined. Environ. Plan. B: Plan. Des. *31* (5), 743–758. https://doi.org/10.1068/b3065.

Allers, M.A., 2015. The Dutch Local Government Bailout Puzzle. Public Adm. *93* (2), 451–470. https://doi.org/10.1111/padm.12123.

Arnaboldi, M., Lapsley, I., 2009. On the implementation of accrual accounting: a study of conflict and ambiguity. Eur. Account. Rev. *18* (4), 809–836. https://doi.org/10.1080/09638180903136225.

Azhar, Z., Alfan, E., Kishan, K., Assanah, N.H., 2022. Accrual accounting at different levels of the public sector: a systematic literature review. Aust. Account. Rev. *32* (1), 36–62. https://doi.org/10.1111/auar.12357.

Bac, A.D., 2002. Dutch private sector and local government accounting regulations: a comparison. J. Public Budg., Account. Financ. Manag. *14* (4), 595–618.

Barton, A., 2005. Issues in Accrual Accounting and Budgeting by Government. Agenda.: A J. Policy Anal. Reform *12* (3), 211–226. ⟨http://www.jstor.org/stable/43199347⟩.

BBV, 2003. Besluit begroting en verantwoording provincies en gemeenten. Staat Van. het Koninkr. der Ned. ⟨https://zoek.officielebekendmakingen.nl/stb-2003-27.html⟩ *2003-27*.

Bell, A.R., Brooks, C., Killick, H., 2022. The first real estate bubble? Land prices and rents in medieval England c. 1300–1500. Res. Int. Bus. Financ. *62*, 101700 https://doi.org/10.1016/j.ribaf.2022.101700.

Benito, B., Montesinos, V., Bastida, F., 2008. An example of creative accounting in public sector: The private financing of infrastructures in Spain. Crit. Perspect. Account. *19* (7), 963–986. https://doi.org/10.1016/j.cpa.2007.08.002.

BNG. (2023). *Annual Report BNG Bank 2022*. ⟨https://www.bngbank.nl/-/media/Project/CBB/BNG-Bank-Shared/Documents/Annual-Report-2022/BNGDOCS3263737v1JV-22-UK–Annual-Report-BNG-Bank-2022–incl-disclaimer.PDF⟩.

Bonnema, W., 2004. Het baten-lastenstelsel en de weerzin van de departementen. Maandbl. voor Account. En. Bedrijfsecon. *78* (3), 81–88. https://doi.org/10.5117/mab.78.15711.

Bradbury, M., Scott, T., 2015. The association between accounting performance and constituent response in political markets. Pac. Account. Rev. *27* (4), 394–410. https://doi.org/10.1108/PAR-02-2014-0007.

Bradley, Q., 2020. The financialisation of housing land supply in England. Urban Stud. *58* (2), 389–404. https://doi.org/10.1177/0042098020907278.

Bradley, Q., 2021. The accountancy of marketisation: Fictional markets in housing land supply. Environ. Plan. A: Econ. Space *54* (3), 493–507. https://doi.org/10.1177/0308518X211061583.

Budding, T., Ormel, E., 2018. Betere vergelijkbaarheid en meer transparantie verslaggeving gemeenten? Maandbl. voor Account. En. Bedrijfsecon. *92* (11/12), 391–400. https://doi.org/10.5117/mab.92.30748.

Canelas, P., Noring, L., 2022. Governmentalities of land value capture in urban redevelopment. Land Use Policy *122*, 106396. https://doi.org/10.1016/j.landusepol.2022.106396.

CBS. (2016). *Handleiding Downloaden Iv3 open data via het dataportaal* Centraal Bureau voor de Statistiek. ⟨https://www.cbs.nl/-/media/open-data/handleiding-downloaden-iv3-open-data-via-het-dataportaal.pdf⟩.

CBS. (2022). *Gemeenterekeningen; balans naar regio en grootteklasse*. Centraal Bureau voor de Statistiek. ⟨https://opendata.cbs.nl/statline/#/CBS/nl/dataset/71231ned/table?dl=73AD0⟩.

CBS. (2023a). *Bevolking op 1 januari en gemiddeld; geslacht, leeftijd en regio*. ⟨https://opendata.cbs.nl/#/CBS/nl/dataset/03759ned/table?dl=39E0B⟩.

CBS. (2023b). *Jaarmutatie consumentenprijsindex*. ⟨https://opendata.cbs.nl/statline/#/CBS/nl/dataset/70936NED⟩.

Cohen, S., Bisogno, M., Malkogianni, I., 2019. Earnings management in local governments: the role of political factors. J. Appl. Account. Res. *20* (3), 331–348. https://doi.org/10.1108/JAAR-10-2018-0162.

Commissie BBV. (2016). *Notitie Grondexploitaties 2016*. ⟨https://raad.noordoostpolder.nl/Vergaderingen/Commissie-Woonomgeving/2017/18-december/19:30/07-03-notitie-grondexploitaties-2016-BBV.pdf⟩.

Commissie BBV. (2019). *Notitie Grondbeleid in begroting en jaarstukken (2019)* . ⟨https://vng.nl/sites/default/files/2019-11/notitie_grondbeleid_in_begroting_en_jaarverslaggeving_juli_2019.pdf⟩.

CV1995. (1994). Besluit comptabiliteitsvoorschriften 1995. *Staatsblad van het Koninkrijk der Nederlanden, 1994-363*. ⟨https://zoek.officielebekendmakingen.nl/stb-1994-363.pdf⟩.

De Vries, M.S., 2008. Stability despite Reforms: Structural Asymmetries in Dutch Local Policy Networks. Local Gov. Stud. *34* (2), 221–243. https://doi.org/10.1080/03003930701852286.

Deakin, M., 1999. The financial instruments of capital accounting in local authorities. J. Prop. Invest. Financ. *17* (1), 89–107. https://doi.org/10.1108/14635789910252927.

Eerste Kamer. (1909). *Handelingen 11e vergadering 29/12/1909. Wijziging der Gemeentewet. Regeling van de Wijze van zekerheidstelling door gemeente-ambtenaren.* ⟨https://repository.overheid.nl/frbr/sgd/19091910/0000347406/1/pdf/SGD_19091910_0000036.pdf⟩.

Faber, A., De Jong, E.J., De With, E., 1989. De gemeenterekening. Maandbl. voor Account. En. Bedrijfsecon. *63* (7/8), 299–305. https://doi.org/10.5117/mab.63.20579.

Ferreira, A., Carvalho, J., Pinho, F., 2013. Earnings Management Around Zero: A motivation to local politician signalling competence. Public Manag. Rev. *15* (5), 657–686. https://doi.org/10.1080/14719037.2012.707679.
Geheb, P.J.F., 2009. Tax Increment Financing Bonds as "Debt" Under State Constitutional Debt Limitations. Urban Lawyer *41* (4), 725–753. ⟨https://www.jstor.org/stable/27895746⟩.
Gemeente Enschede. (2012). *Grip op grond: Raadsenquête naar het grondbeleid in de gemeente Enschede*. ⟨https://documenten.enschede.nl/budgetting/media/ed3794ca-dee3-408c-9aa5-d4d119137c1b/Eindrapport_Grip_op_grond.pdf⟩.
Gemeente Enschede. (2016a). *Besluitenlijst van de gemeenteraad 31 oktober 2016*. ⟨https://enschede.bestuurlijkeinformatie.nl/Agenda/Document/fb0704ce-9d74-4c74-8f38-18c00918d14f?documentId=bcd83294-0b8f-472e-8d20-6b31c876986a⟩.
Gemeente Enschede. (2016b). *Financiële effecten richting aan ruimte en veranderende regelgeving BBV* . ⟨https://enschede.bestuurlijkeinformatie.nl/Agenda/Document/3b676119-e26c-455f-918a-d219b401730b?documentId=d921c55c-a5ff-4942-ab3f-fb946e197bd0⟩.
Gemeente Enschede. (2018). *Gemeenterekening 2017*. ⟨https://documenten.enschede.nl/gemrek2017⟩.
Gemeente Enschede. (2019). *Nota Grondbeleid*. ⟨https://channel.royalcast.com/enschede/#!/enschede/20191202_2⟩.
Gemeente Enschede. (2021). *Gemeenterekening 2020* . ⟨https://documenten.enschede.nl/paragrafen2160⟩.
Gemeente Enschede. (2022). *Meerjaren Perspectief Grondbedrijf 2022, Deel 1* . ⟨https://channel.royalcast.com/enschede/#!/enschede/20220607_2⟩.
Gemeente Enschede. (2023). *Documenten*. ⟨https://documenten.enschede.nl/archief⟩.
Gemeentewet. (1851). Wet van den 29sten junij 1851, regelende de zamenstelling, inrigting en bevoegdheid der Gemeentebesturen. *Staatsblad van het Koningrijk der Nederlanden, 1851-1885*. ⟨https://resolver.kb.nl/resolve?urn=MMKB10:001062002:00029⟩.
Gielen, E., Riutort-Mayol, G., Miralles i Garcia, J.L., Palencia Jiménez, J.S., 2019. Cost assessment of urban sprawl on municipal services using hierarchical regression. Environ. Plan. B: Urban Anal. City Sci. *48* (2), 280–297. https://doi.org/10.1177/2399808319869345.
Giosi, A., 2020. Public Sector Accounting and the Sustainability of Public Finance Among Accounting Bases, Harmonization, and Flexibility Concerns. In: Brunelli, S., Di Carlo, E. (Eds.), Accountability, Ethics and Sustainability of Organizations: New Theories, Strategies and Tools for Survival and Growth. Springer International Publishing, pp. 155–173. https://doi.org/10.1007/978-3-030-31193-3_8.
Gradinaru, S.R., Paraschiv, M., Iojă, C.I., Vliet, J.V., 2023. Conflicting interests between local governments and the European target of no net land take. Environ. Sci. Policy *142*, 1–11. https://doi.org/10.1016/j.envsci.2023.01.012.
Grossi, G., Steccolini, I., Adhikari, P., Brown, J., Christensen, M., Cordery, C., Ferry, L., Lassou, P., McDonald Iii, B., Raudla, R., Sicilia, M., Vinnari, E., 2023. The future of public sector accounting research. A polyphonic debate. Qual. Res. Account. Manag. *20* (1), 1–37. https://doi.org/10.1108/QRAM-09-2022-0135.
Hartmann, W.J., 1924. Accountants in dienst van gemeenten. Maandbl. voor Account. En. Bedrijfsecon. *1* (1), 1–3. https://doi.org/10.5117/mab.1.10001.
Innes, J.E., Booher, D.E., 1999. Consensus building as role playing and bricolage. J. Am. Plan. Assoc. *65* (1), 9–26. https://doi.org/10.1080/01944369908976031.
Ionescu, B., Stoian, F., Gabrela, T.G., Petroianu, G.O., 2016. Assurance of a Credible Financial Information: A Product of Convergence Between Prudence and Continuity by Statutory Audit and a Good Corporation Governance. *Eurasia Stud. Bus. Econ.* 113–126. https://doi.org/10.1007/978-3-319-27573-4_7.
Kang, V., Korthals Altes, W.K., 2015. Public accountability in planning for new housing areas. Proc. Inst. Civ. Eng. - Munic. Eng. *168* (4), 235–243. https://doi.org/10.1680/muen.14.00042.
Korthals Altes, W.K., 2006. The single European market and land development. Plan. Theory Pract. *7* (3), 247–266. https://doi.org/10.1080/14649350600841412.
Korthals Altes, W.K., 2010. The financial estimates and results of servicing land in the Netherlands. Environ. Plan. B: Plan. Des. *37* (5), 929–941. https://doi.org/10.1068/b36027.
Korthals Altes, W.K., 2019. Annington versus Deutsche Annington. Hous., Theory Soc. *36* (2), 228–253. https://doi.org/10.1080/14036096.2018.1479300.
Korthals Altes, W.K., Boumeester, H.J.F.M., Dol, C.P., Groetelaers, D.A., Louw, E., & De Wolff, H.W. (2012). *Factoren, veranderingen, sturing: raadsenquête grondbeleid gemeente Enschede*. TU Delft. ⟨http://resolver.tudelft.nl/uuid:43e03732-c6a2-4ba5-a379-5503b49ff65d⟩.
Kruythoff, H., Teule, R., 1997. Vinex policy moves into the implementation phase. Neth. J. Hous. Built Environ. *12* (1), 113–133. https://doi.org/10.1007/BF02502626.
Letwin, O. (2018). *Independent Review of Build Out Rates: Draft Analysis*. Ministry of Housing, Communities and Local Government. ⟨https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718878/Build_Out_Review_Draft_Analysis.pdf⟩.
Lind, H., 2009. Price bubbles in housing markets: Concept, theory and indicators. Int. J. Hous. Mark. Anal. *2* (1), 78–90. https://doi.org/10.1108/17538270910939574.
Lorson, P., Haustein, E., 2019. Debate: On the role of prudence in public sector accounting. Public Money Manag. *39* (6), 389–390. https://doi.org/10.1080/09540962.2019.1583907.
Maltby, J., 2000. The origins of prudence in accounting. Crit. Perspect. Account. *11* (1), 51–70. https://doi.org/10.1006/cpac.1998.0283.
McAllister, P., 2017. The calculative turn in land value capture: Lessons from the English planning system. Land Use Policy *63*, 122–129. https://doi.org/10.1016/j.landusepol.2017.01.002.
McAllister, P., Shepherd, E., Wyatt, P., 2022. An exploration of the role and significance of specialist land promoters in the housing land development market in the UK. J. Prop. Res. 1–23. https://doi.org/10.1080/09599916.2022.2114927.
Murray, C.K., 2020. Time is money: How landbanking constrains housing supply [Article] (Article). J. Hous. Econ. *49*, 101708. https://doi.org/10.1016/j.jhe.2020.101708.
Murray, C.K., Gordon, J.C., 2023. Land as airspace: how rezoning privatizes public space (and why governments should not give it away for free). Hous. Policy Debate 1–14. https://doi.org/10.1080/10511482.2023.2234878.
Needham, B., 1992. A Theory of Land Prices when Land is Supplied Publicly: The Case of the Netherlands. Urban Stud. *29* (5), 669–686. https://doi.org/10.1080/00420989220080621.
O'Brien, P., Lord, A., Dembski, S., 2020. How do planners manage risk in alternative land development models? An institutional analysis of land development in the Netherlands. Land Use Policy *91*, 104409. https://doi.org/10.1016/j.landusepol.2019.104409.
Oldewelt, W.F.H., 1971. De Boekhouding van Amsterdam. Jaarb. Van. het Genoot. Amstelodamum *63*, 11–18. ⟨https://archief.amsterdam/inventarissen/scans/499/3.8.33/start/210/limit/10/highlight/7⟩.
Overmans, T., 2017. Financial Resilience: How Dutch Cities Have Buffered and Adapted to the Financial Crisis. In: Steccolini, I., Jones, M., Saliterer, I. (Eds.), Governmental Financial Resilience, Vol. 27. Emerald, pp. 173–186. https://doi.org/10.1108/S2053-769720170000027010.
Palea, V., 2015. The political economy of fair value reporting and the governance of the standards-setting process: Critical issues and pitfalls from a continental European union perspective. Crit. Perspect. Account. *29*, 1–15. https://doi.org/10.1016/j.cpa.2014.10.004.
Palea, V., 2017. Whither accounting research? A European view. Crit. Perspect. Account. *42*, 59–73. https://doi.org/10.1016/j.cpa.2016.03.002.
Paulsen, K., 2014. The Effects of Land Development on Municipal Finance. J. Plan. Lit. *29* (1), 20–40. https://doi.org/10.1177/0885412213497982.
Phelps, N.A., Miao, J.T., 2023. It's the hope I can't stand': planning, valuation and new community building. J. Prop. Res. 1–22. https://doi.org/10.1080/09599916.2023.2183887.
Rekenkamer Amsterdam. (2006). *Vereveningsfonds*. ⟨https://www.rekenkamer.amsterdam.nl/content/uploads/2013/05/vereveningsfonds_rapport_tekst.pdf⟩.
RICS. (2021). *RICS Valuation – Global Standards*. Royal Institution of Chartered Surveyors. ⟨https://www.rics.org/profession-standards/rics-standards-and-guidance/sector-standards/valuation-standards/red-book/red-book-global⟩.
Savini, F., 2016. Planning, uncertainty and risk: The neoliberal logics of Amsterdam urbanism. Environ. Plan. A: Econ. Space *49* (4), 857–875. https://doi.org/10.1177/0308518X16684520.
Siblesz, J., 1925. De Financiering van het Gemeentelijk Grondbedrijf. Maandbl. voor Account. En. Bedrijfsecon. *2* (9), 121–125. https://doi.org/10.5117/mab.2.20983.
Statline IV3. (2022). *Data van gemeenten, gemeenschappelijke regelingen, provincies en/of waterschappen, verzameld door het CBS*. ⟨https://iv3statline.cbs.nl⟩.
Textor, J.H., 1935a. Uit de Financieele Huishouding der Overheid: Taxatie bij grondbedrijven. Maandbl. voor Account. En. Bedrijfsecon. *12* (5), 74–76. https://doi.org/10.5117/mab.12.16453.
Textor, J.H., 1935b. Uit de Financieele Huishouding der Overheid: Taxatie bij grondbedrijven II. Maandbl. voor Account. En. Bedrijfsecon. *12* (6), 90–92. https://doi.org/10.5117/mab.12.17062.
Tillema, S., ter Bogt, H.J., 2016. Does an Agency-Type of Audit Model Fit a Stewardship Context? Evidence from Performance Auditing in Dutch Municipalities. Financ. Account. Manag. *32* (2), 135–156. https://doi.org/10.1111/faam.12084.
TLGRC. (2002). *The need for a new European regeneration framework*. Transport, Local Government and the Regions Committee, House of Commons. ⟨https://publications.parliament.uk/pa/cm200102/cmselect/cmtlgr/483/483.pdf⟩.
United Nations. (2022). *The Sustainable Development Goals Report 2022*. ⟨https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf⟩.
Vallés, J., Zárate, A., 2007. Fiscal Federalism, European Stability Pact, and Municipal Investment Finance: A Microdata Analysis of Spanish Municipalities. Publius: J. Fed. *37* (1), 68–102. https://doi.org/10.1093/publius/pjl016.
Van der Krabben, E., Jacobs, H.M., 2013. Public land development as a strategic tool for redevelopment: Reflections on the Dutch experience. Land Use Policy *30* (1), 774–783. https://doi.org/10.1016/j.landusepol.2012.06.002.
Van Loon, J., Oosterlynck, S., Aalbers, M.B., 2019. Governing urban development in the Low Countries: From managerialism to entrepreneurialism and financialization. Eur. Urban Reg. Stud. *26* (4), 400–418. https://doi.org/10.1177/0969776418798673.
van Oosten, T., Witte, P., & Hartmann, T. (2018). Active land policy in small municipalities in the Netherlands: "We don't do it, unless…". *Land Use Policy*, *77*, 829-836. https://doi.org/10.1016/j.landusepol.2017.10.029.
Vejchodská, E., Barreira, A.P., Auziņš, A., Jürgenson, E., Fowles, S., Maliene, V., 2022. Bridging land value capture with land rent narratives. Land Use Policy *114*, 105956. https://doi.org/10.1016/j.landusepol.2021.105956.
Vollmer, H., 2003. Bookkeeping, Accounting, Calculative Practice: The Sociological Suspense of Calculation. Crit. Perspect. Account. *14* (3), 353–381. https://doi.org/10.1016/cpac.2002.0528.
Vos, K., Scholte, O.F., 2012. Jaarverantwoording van grondexploitatie in crisis; welk beeld geeft de gemeentelijke jaarrekening? Maandbl. voor Account. En. Bedrijfsecon. *86* (9), 587–602. https://doi.org/10.5117/mab.86.21911.
VVG. (2023). *Gewenste veranderingen voor een slagvaardiger grondbeleid en gebiedsontwikkeling: Input voor de brief aan de Tweede Kamer over vernieuwing van het Grondbeleid*. ⟨https://www.vvg.nl/media/253/NL/algemeen/original/230314%20VvG%20Puntenplan%20input%20TK%20Brief%20Grondbeleid.pdf⟩.
Wigger, A., Nölke, A., 2007. Enhanced roles of private actors in EU business regulation and the erosion of rhenish capitalism: The case of antitrust enforcement. J. Common Mark. Stud. *45* (2), 487–513. https://doi.org/10.1111/j.1468-5965.2007.00719.x.

Woestenburg, A.K., van der Krabben, E., Spit, T.J.M., 2018. Land policy discretion in times of economic downturn: How local authorities adapt to a new reality. Land Use Policy *77*, 801–810. https://doi.org/10.1016/j.landusepol.2017.02.020.

Woestenburg, A., van der Krabben, E., Spit, T., 2019a. Legitimacy Dilemmas in Direct Government Intervention: The Case of Public Land Development, an Example from the Netherlands. Land *8* (7). https://doi.org/10.3390/land8070110.

Woestenburg, A., van der Krabben, E., Spit, T., 2019b. Urban regeneration and public land development: land transaction processes and price formation. Town Plan. Rev. *90* (1), 11–31. https://doi.org/10.3828/tpr.2019.3.

Zonneveld, W., Evers, D., 2014. Dutch national spatial planning at the end of an era. In: Reimer, M., Getimis, P., Blotevogel, H. (Eds.), Spatial Planning Systems and Practices in Europe: A Comparative Perspective on Continuity and Changes. Taylor & Francis, pp. 61–82. https://doi.org/10.4324/9781315852577.