



**UNFAO**



**Latvian Forest  
Service**

*Strengthening the Institutional Capacity of the Latvian Forest Authority  
TCP/LAT/8821*

*A macroeconomic survey of the forestry sector in Latvia*

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## **Acronyms and abbreviations**

AAC	Allowable Annual Cut
Adt/a	Air dry ton per annum
Cif	cost insurance freight
CIS	Commonwealth of Independent States
CSBL	Central Statistical Bureau of Latvia
CM	Cabinet of Ministers
EFTA	European Free Trade Agreement
ESA	European System of Accounts
EU	European Union
FAO	United Nations Food and Agriculture Organisation
fas	free along side
FD	Forest Department
FDF	Forest Development Fund
FDI	Foreign Direct Investment
fob	free on board
FS	Forest Service
GDP	Gross Domestic Product
GOL	Government of Latvia
HS	Harmonized Commodity Description and Coding System
IFC	International Finance Corporation
ISIC	International Standard Industrial Classification of All Economic Activities
LFI	Law on Foreign Investment
LSFS	Latvian State Forest Service
LDA	Latvian Development Agency
MFN	Most Favoured Nation
MOA	Ministry of Agriculture
MOE	Ministry of Economy
MOF	Ministry of Finance
NACE	Nomenclature Generale des Activities Economique dans les Communautés Europeenes
ROL	Republic of Latvia
SFD	State Forest Department
SFS	State Forest Service
SME	Small and Medium Enterprises
SNA	System of National Accounts
SY	Sustained Yield
Tpd	tons per day
WTO	World Trade Organisation
WWF	Worldwide Fund for Nature
WWII	World War Two

## Acknowledgements

Collecting credible representative data in any country in transition between markedly different socio-political-economic systems can be a difficult task. Major problems encountered during this consultancy, for instance, included:

- ✓ total data voids for many parameters
- ✓ absence of useful time series data
- ✓ data aggregation levels inappropriate to project needs
- ✓ unknown population size or sampling intensity for several statistics, thereby leaving indeterminate their actual representativeness
- ✓ preserving confidentiality where only one or two operators are active.

To overcome these difficulties, this consultancy benefited greatly from the assistance of a number of individuals without which its observations would necessarily have been significantly further curtailed.

Specific guidance was, indeed, necessary to fill pronounced voids in data, and to avoid misrepresenting, overstating or understating certain statistics. The individuals we came to rely upon ensured that, where appropriate, qualifications were attached to avoid these traps and to more accurately characterise data worthiness.

As much as possible the most current available data was used to prepare this report – including several bulletins of the *Central Statistical Bureau of Latvia*. These follow NACE, HS, ESA and SNA, and BEC conventions in respect of producing standardised reports on national statistics – and in this respect are on a calibre with, for example, reports produced by EU members.

Specifically, we would like to thank *Ms. Iya Budreko* for her assistance in preparing an approximation of the current raw material supply flows within the Latvian forest sector. This had not been previously attempted and would not otherwise have been elsewhere available. *Dr. Olegs Baranovs*, of the Ministry of Economy, Macroeconomic Analysis and Prognoses Department, deserves our thanks, which we now extend, for providing a valuable concurrent review of this report. Within the Central Statistical Bureau of Latvia, the project was assisted by *Ms. Ilze Skujeniece* and *Mr. Janis Kalnins*, who provided clarification on a number of issues related to statistics gathering and compilation.

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## Preface

Reports of the type presented here tend to demand a high level of rigorous analysis and statistical credibility. This sometimes effectively obscures realities that may not otherwise enter into discussions because of their anecdotal nature.

It can not escape the knowledgeable observer that the potential for the Latvian forest sector is significant. This is even demonstrated by several of the statistics presented below. The potential for the forest sector has been clearly identified by, for instance, the Latvian Ministry of Economy and the OECD, in separate reports.

The MOE report, *Economic Development of Latvia, June 1998*, refers to, "... a big potential in terms of enlargement of production ...". It suggests that incomes are being lost because exports consist mainly of roundwood and sawnwood and that "deep" processing constitutes a very small portion of exports. In addition, the first page of the introductory "Overview" section of the OECD, *Investment Guide for Latvia, 1998*, report refers to, "...lucrative opportunities for foreign investors ...", in the country's wood processing sector.

Early rationalisation and restructuring of Latvia's forest sector included a period of radical land and fixed capital redistribution that has thus far served the initial phases of transition admirably. In many cases, productivity, incomes and profits now exceed all earlier levels. Subsequent phases of transition reforms will further reconfigure the flow of raw material, capital and economic rents amongst the participants in this sector. It is assumed that the ultimate goal includes that of creating an internationally competitive forest sector in Latvia capable of reasonably effectively defending itself within the international markets and broader commercial unions – and meeting Latvia's economic and social welfare development expectations.

In all countries in transition, reform faces the prospect of resistance from entrenched interests – public sector and private sector – having specific objectives that diverge from broader social objectives held by society. The consequence of this is very dramatically evident in former centrally planned economies.

The final outcome of attempts to optimise forest sector institutions and structures will be determined by historical precedents, by rigorous and demonstrable economic, management and legal concepts, and by the extent to which a transparent, responsible and accountable process of participation is forthcoming from participants and stakeholders. Where any of these are compromised, results will be sub-optimal and must necessarily be re-visited in future processes.

## 1. Introduction

This report presents the outcome of a macroeconomic survey of the forest sector of the Republic of Latvia. The survey is a product of the first two inputs of a macroeconomic consultancy integrated into the ROL/FAO “*Strengthening the Institutional Capacity of the Latvian Forest Authority*” project. It presents issues and parameters facing public and private sector decision-makers in their respective attempts to develop this sector. It identifies opportunities and constraints to investment and proposes measures to, accordingly, either engage them or remove them. It also attempts to introduce simple methodologies to undertake analysis currently constrained by the absence of more comprehensive data.

### 1.1 Forest sector background

In the early part of this decade the Republic of Latvia underwent a not so quiet revolution, which eventually resulted in a shift from a centrally planned command economy to a more market, oriented competitive economy. The country has achieved many milestones since then, though in many respects it is still “emerging” from the former conditions and in “transition” to the latter. As a consequence, the governance instruments, institutions and economic systems and practices of even the recent past are less able to serve the needs of society’s expectations for its forest resources as well as they could.

The dominant form of pre-1991 socio-economic organisation and practices in the ROL forest sector reflected the common soviet approach to forest management. As elsewhere in that former regime, this provided a rigid doctrinaire style of prescriptions and interventions. It presented extremely limited scope for responding to, amongst other variables, differences in forestland productivity, species and age class distributions, manufacturing infrastructure and to changing market circumstances. Debatable “norms” and “decrees” prevailed over more defensible principles widely accepted and in effect in more mature forestry constituencies elsewhere. It is now well known, in spite of the above, that Latvian forest managers effectively conspired to thwart soviet efforts to harvest local forests by understating forest yields, and a variety of other mechanisms.

On most fronts – though not all – there appears little reluctance to modernise Latvia’s forest sector. As much as possible, efforts have been undertaken to return to previous owners pre-1940 private lands that were confiscated and collectivised. For now – and maybe forever – the state has chosen to retain ownership in lands that it has traditionally held – at least to the extent that this was the case before WWII. In respect of public forestlands in the ROL, the state retains the full range of responsibility for forest management – from crop establishment to harvest. The post-harvesting re-establishment of forest crops on private lands is also prescribed by the state.

There is significant evidence of recent dramatic changes in the forest industry in Latvia. A variety of firms are producing and exporting manufactured products, and not just roundwood – though those volumes do remain very high. Aside from sawnwood, capacity improvements have been achieved in veneer, chipboard, fibreboard and plywood. With IFC assistance, an information memorandum has been produced

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presenting a prospectus-like review for the construction of a new green-field 500,000 or 600,000 Adt/a pulp mill.

A token of the recent approach to enhancing the capacity of the country's forestry authorities and related institutions (organisations and practices) is seen in the recruitment in the SFS and SFD of several new management and professional staff. The previous order of socially and economically questionable approaches and results is being rejected – here and in society at large. The shift in focus is obvious and directed towards the goal of reorienting public and private sectors alike towards effective and efficient sustainable forest management.

The ROL/FAO project, of which this consultancy is a part, is largely focused upon providing a model for reshaping the institutional, governance (legal) and economic structures covering Latvia's forestry sector. It is guided by the country's forest policy and its current (post-October 1998) government's legislative and social platform regarding the state's role in this sector.

This report describes forest sector parameters, activities and outcomes and relates them to "macro" issues that, because of their scope, generally involve state initiatives in their resolution. It describes certain sectoral outcomes and what they could potentially be. It describes the significance of both the existence of certain practices and of the absence of others. It accomplishes this to the extent existing sectoral statistics and data permit.

## ***1.2 Caveat to Survey Approach***

As much as possible, basic macroeconomic observations were derived for existing configurations within the forest sector (timber supply, processing capabilities, relevant infrastructure, products and their markets, etc.).

The principal constraint to conducting a more comprehensive economic (macro or micro) survey of the forest sector relates to the absence of already processed or even raw data on industry structure and performance. Frequently where data is available, its providers quite openly and accurately identify many reasons for considering it incomplete and, to different degrees, unrepresentative.

The economic survey presented in this report can only be considered a "first approximation" though it surpasses previous efforts to examine the macroeconomics of Latvia's forest sector.

Statistics collection in Latvia has progressed considerably since independence. Aspects of it are, in fact, very well advanced and comparable to the best found elsewhere. Standard EU and UN approaches, as well as others, are in place and already facilitate some useful comparisons with other international constituencies.

A major problem still to be adequately addressed lies less with data processing or documentation and more with data collection. For a variety of reasons, (historical mistrust of authority, tax evasion, non-enforcement, etc.) it is conceded that sampling

procedures currently do not result in a complete or accurate representation of the population parameters they are meant to monitor.

As much as possible during this consultancy, attempts were made to collect the most current and comprehensive data potentially available to it. Generally this effort was accomplished – and further emphasised what data was actually not available.

### ***1.3 Report structure***

The ROL/FAO project is comprised of two phases. The first phase conducted analyses of major economic, institutional and legal issues within the forest sector. These will provide a “snapshot” of sectoral parameters and a starting point for the second phase. The second phase synthesises options for optimising the structure of state forest authorities. The immediate objective is to stimulate the development of, i) a more productive forest resource base and of, ii) a competitive forest industry able to maximise its potential contribution to the Latvian economy.

To provide a context for the project activities and its analysis and observations, existing national forestland development objectives are discussed in Chapter 2 along with how these relate to key issues of optimising forest use.

Chapter 3 describes the forest land resource base and presents concepts related to its valuation. Chapter 4 presents specific macroeconomic indicators defining the economic context within which the forest sector operates.

Chapter 5 reviews forest sector value-added activities and levels to the extent permitted by the credibility and representativeness of existing data. A simplified value-added model was developed for this project to demonstrate its potential flow amongst claimants. The outcomes it produced derive from preliminary analysis which the economic component of the ROL/FAO project will continue to develop beyond the term of this specific consultancy.

Constraints to, and opportunities for, sectoral development are presented in Chapter 6. This section includes brief observations of political and economic risk for the sector. Though a greater depth of investigation into potential investors would be useful to broaden this discussion - generally overall indications are positive.

Key recommendations and conclusions are provided in Chapter 7. A glossary of terminology and a list of references appear at the end of this volume.

## 2. Development Objectives

### 2.1 General Concepts

Management of Latvia's natural resources necessarily commences with an agreement upon objectives for their development.

The public sector organisational restructuring being investigated and developed by the ROL/FAO project, and its consequences for both public and private forest sectors, represents a major departure from past approaches. It implies a scale of activities and scope for changes that clearly eclipse past efforts.

One of the features of this project is to improve both public and private sector participation in this process – to minimise potential stakeholder conflicts and promote high levels of “ownership” in project outputs. The composition of steering committees and working groups is predicated on this goal. Examples of groups between which potential divergence of objectives could occur include, i) timber development & wildlife conservation, ii) public forest management & private land holders, iii) short term licenses & long term tenure holders and, iv) different geographic areas or user groups.

Natural resource development objectives can not be finalised without reference to other natural resource sectors as well – both in public and private sectors. The overall project recognises this and is examining its consequences in both its legislation and macroeconomic components – some of the latter being introduced in this report.

Specific objectives, the implementation of which may directly influence Latvia's forest sector development paths and eventual economic potential, include:

- ✓ redistribution of earlier confiscated and collectivised land
- ✓ timber allocation policy and mechanisms
- ✓ private forest management regulations
- ✓ state Forest Service capacity and jurisdiction
- ✓ non-Forest Service natural resource legislation (agriculture, environment, rural development, etc.)

The following issues, though far less under the control of state forestry authorities, can also significantly influence forest sector development strategies:

- ✓ legislation regarding foreign investment practices (principal of national treatment, capital and dividend repatriation, stock ownership limitations, joint venture regulations, protection against nationalisation, dispute settlement mechanisms, etc.)
- ✓ relaxation of border restrictions for individuals, goods and transport
- ✓ corruption prevention legislation
- ✓ taxation regulations (definitions, interpretations, training and competency of personnel,
- ✓ state infrastructure development
- ✓ currency exchange rate policy
- ✓ requirements for accession to EU



Improving forest sector performance through project efforts is motivated by increasing the sector's contribution to Latvia's national economy and social welfare. Comparisons of social welfare within and amongst countries is usually accomplished by reference to such indicators as employment, GDP, income levels, literacy rates, life expectancy and many others. Social welfare is also correlated to a large number of other indicators more indirectly

Worldwide, there exist dramatic examples of where the potential for forest sector contributions to national economic development has been usurped by a small group of elites or even single individuals. However, forest sector development has featured prominently as a major contributor to development in many countries. This is the case in Latvia where wood and wood products accounted for just over 32% of the country's foreign exchange earnings for 1997 (MOE, 1998, p31). The relative impact of this sector – at least for the period indicated – is clear.

The completion of at least a first approximation of a forest sectoral analysis for Latvia will make it possible to state more conclusively how priorities and approaches to overall forestland development will contribute to:

- ✓ maximising the full range of benefits that Latvia's forest lands can produce
- ✓ integrating Latvia's environmental/ biophysical resources and social/ cultural resources into the development process in a manner consistent with society's objectives for these
- ✓ distributing the benefits of development in an equitable pattern acceptable to society in the short and long-term.

Decision makers are facing increasing societal demands for, i) integration of social/ cultural and environmental/ biophysical issues into the objectives, plans and implementation of development activities and, ii) a growing insistence on stakeholder participation in the related decision making processes.

At both national and international levels, Latvia is including in its own reordering of development priorities a commitment to socio-environmental principles as articulated by a number of international events and agreements. Latvia is a participant in a number of these and generally subscribes to the goals of others, including:

- ✓ World Trade Organisation (late 1998)
- ✓ World Conference on Environment and Development, 1992, (the "earth Summit" or "Rio Conference")
- ✓ Convention on Biodiversity
- ✓ Intergovernmental Panel on Climate Change
- ✓ Intergovernmental Panel on Forests

## **2.2 Forest management objectives**

In the past, Latvia generally has followed forest management practices stemming from the "sustained yield" (SY) tradition of mid-nineteenth century Germany. These represent the earliest formally articulated concepts of "sustainability" in natural resource

management. Modern concepts of sustainable development (SD) are much more exhaustive – and, along with commitments to preserving biodiversity, form the bases of much of Latvia’s forest management objectives.

The net annual increment of Latvia’s growing stock has been recently (late 1998) re-calculated to be 14,060,000 m<sup>3</sup> per annum. This demands a considerable level of planning to actually accomplish – and has, in fact, never been accomplished. Potential harvest levels directly influence decisions regarding:

- ✓ timber supply allocation
- ✓ production technologies and capacity
- ✓ employment and incomes generation
- ✓ government revenues (and public expenditures).

The role of the many issues presented above, in supporting efforts to promote economic activity in the forest sector and increase national welfare and stability is apparent. This “big picture” orientation warrants continuous reference in the course of efforts to optimise forest sector structures and roles.

### ***2.3 Wood products manufacturing objectives***

The objectives for Latvia’s wood products manufacturing sector derive most directly from the potential value-added it can yield. The character of the timber supply, and product and market development potential will largely determine value-added levels. These, in turn, have a direct bearing upon, i) the raw materials' physical and economic accessibility, ii) enterprise viability, and iii) the sector’s contribution to the national economy. In the long-term, almost all criteria can be manipulated, including that of the character of the raw material and domestic infrastructure. In the short term, the challenges are less easily surmountable.

Forest management interventions can directly affect the character of the sector’s log supply. If pulpwood is the targeted end product then the objective for forest stands, at the time of harvesting, may be that of maximum sound wood volume. If higher quality veneer or sawnwood is sought, then large clear stems may be the objective. In Latvia, unthinned stands represent a relatively large unused timber resource – potentially available for chip, strand or particle boards, whole log chipping and sales, or a domestic pulpmill – depending upon which, if any, of these options meets private and public sector development criteria.

### ***2.4 Non-wood products objectives***

The management of forestland resources for wood products routinely attracts a higher priority than for non-wood products. This often relates to their usually higher and almost always more quantifiable contribution to social and/or corporate welfare. The benefits that derive from logging and sawmilling can all be measured in economic terms. This is less so the case for non-wood products many, if not most, of which are not traded in a market place and the value of which is generally seldom recorded through national accounting procedures.

However, disregarding non-wood products and services in the course of forest land resource management decisions risks having those decisions challenged by stakeholders with legitimate claims to their benefits.

Contemporary forest land management objectives now must include provision for faunal and floral habitats, soil and water conservation, culturally and spiritually significant areas, as well as a large range of recreation values, and food gathering and hunting activities (berries, mushrooms, honey, game meat, etc.). Though less tangible, increasing attention is also being directed towards specific aesthetic values, options values and existence values.

The consequences of “unpriced” or “non-traded” benefits are that they are not adequately accounted for in social or private production functions and are therefore subject to being inefficiently managed. In Latvia, the latter is the case, particularly since 51% (as calculated up to early 1998) of its land area is publicly owned.

## ***2.5 Forest land revenue objectives***

The level of timber revenues from Latvia’s forests will be determined by the configuration of the overall distribution of benefits. Specific revenue targets become part of the determination of development scenarios.

Timber harvesting and wood products manufacturing and their related contributions to *national income* should receive a high priority – which, nevertheless, should remain consistent with other forest land management objectives. These priorities are not static – and will eventually undergo reordering as general welfare increases and society’s aspirations and insistence on non-timber benefits assumes a higher significance.

It is currently difficult to approximate an exact figure for potential annual revenues from wood harvesting and processing activities in Latvia – though this is later attempted in this report. The major difficulty relates to the absence of adequate data in four areas; timber supply (volumes, species, and grade), production capacities (type and output), production costs, and sales (volumes and selling prices). Some data is available on each of the above, though a complete assessment does require projections in each area. Ongoing project activities, beyond the term of this consultancy, include enhancing the quality and representativeness of these critical data inputs.

### 3. Forestland resource ownership and valuation

#### 3.1 Ownership

The issues covered in this section deal essentially with ownership of forestland and the determination of its value. Issues related to “economic rents” inherent in forestlands are reviewed, as are issues related to their realisation and distribution. Immediately below (Table 3.1.1) are presented harvest statistics for Latvia.

	Year							
	1991	1992	1993	1994	1995	1996	1997 <sub>IX</sub>	1998
<b>by ownership</b>								
State forests	3575	3,059	3,797	4,729	5,298	4,483	4,870	
Private forests	--	--	--	--	--	1,471	3,361	
Agriculture enterprises	782	881	882	901	1,333	606	479	
Other	35	75	78	100	256	205	213	
<i>Subtotal (=total cut)</i>	<b>4,392</b>	<b>4,015</b>	<b>4,757</b>	<b>5,730</b>	<b>6,887</b>	<b>6,765</b>	<b>8,923</b>	
<b>by final cut</b>	3,083				3,481	4,126	5,490	
(of which) clear cuts	3,077				3,370	3,954		
<b>by intermediate cuts</b>	1,133				2,848	2,253	3,016	
(of which) cleaning	5				12	13		
Thinning	594				1,210	925		
Sanitary	521				1,615	1,299	1,547	
Conversion	13				11	16		
<b>Windfall &amp; other</b>	176				558	386	417	

<sup>1/</sup> Source: CBSa, CBSf

Valuation should be of no less concern to state owners or forestland resources than it is to private owners. Neither is interested in foregoing any of its potential revenue. Each is interested in maintaining its various benefits at their highest level – including that of timber sales.

Issues relating to timber tenures are often amongst the more contentious of those which state forest authorities must deal with. Other ownership issues include the *exclusivity* of user access, the *enforceability* of the owner/ user's claim, as well as its *divisibility* and transferability. Aspects of these issues are familiar to Latvia – having been taken into consideration in the post-independence redistribution of land.

The state's sovereign right permits it to retain exclusive title to all potential benefits of state forest land resources – though legitimate access is allocated to other users through a variety of short-term and long-term mechanism.

In Latvia's case, the state also reserves the right to prescribe post-harvest reforestation on private forestlands. This means that, in respect of forestlands, the state assume both - a public sector “governance” role, and a private sector “entrepreneur's” role. It is the potential conflict surrounding these divergent interests that constitutes one of the major issues for the ROL/FAO project.

A high level and public debate in Latvia currently suggest that there exist a potential perception of conflict between the state in its role as a forest landowner and in its role as an enforcer of forest practices and legislation. Suggestions also include consideration of assigning these responsibilities to separate state structures.

*Instigating effective mechanisms to ensure responsibility, accountability and transparency is essential for competitive and equitable forest sector development. In their presence, a wider range of governance and management options may succeed than in their absence.*

In well developed mature forestry constituencies a combined ownership / enforcer role may be far less problematic – if at all. This is less the case where there exists a legacy of a command economy, and an historically lower level of responsible, accountable, and transparent governance and management. Latvia’s situation precludes the continued assumption of the dual management-enforcer role in the short term at least – though, in the long term other options exist.

The level of funding on non-wage expenditures on state owned/managed forests is far below what is required for their efficient management and exploitation. Table 3.1.2 gives funding levels for state forest authorities for this decade.

	Year							
	1991 <sup>1/</sup>	1992 <sup>2/</sup>	1993	1994	1995	1996	1997	1998
<b>Base funding</b>	54	430	3.1	3.4	9			
<b>“Special Budget”</b>				3.3	15	13.6	14	22.5
<b>total</b>	54	430	3.1	6.7	24	13.6	14	22.5

Source: Finance & Statistics Department, LSFS; <sup>1/</sup> old roubles, <sup>2/</sup> new roubles,

It is widely accepted that current state budget allotments to the Forest Service and Forest Department have been inadequate for a number of years. Ultimately, inadequate funding compromises efforts to maximise the productivity of forestlands. The state responds to criticism on this point by reference to the inadequacy of its revenues from forestry activities. Private forest interests, thereupon, point out that the state is indifferent to industry’s declared inability to fund similar activities – at the state’s insistence that this is part of tenure arrangements.

### 3.2 Valuation

Independent of its ownership, forestland should be viewed as a capital asset – yielding many benefits quantifiable in many ways. As stated earlier, it is the extent to which these benefits are tangible and quantifiable that often determines whether or not they are ultimately considered in forestland valuation calculations. Timber values are easy to quantify. However, many benefits deriving from forestland are not easy to even identify, let alone quantify - for example, that of soil and water conservation. At least one glaring consequence of the above is the absence in most nation’s System of National Accounts of figures to account for the depreciation (and appreciation) of forestland.

For a number of reasons the natural capital that is the forestland base of Latvia is not maximising its yield. Operation and budgetary issues feature prominently in the cause. However, issues related to crop establishment, thinning and rotation age at harvesting also warrant review. Decisions on these crop management parameters must be based upon their impact upon harvest yields and values – a strategy that is still to be more effectively integrated into forest management in Latvia.

The actual practice of forest management in Latvia can be improved by adopting more appropriate practices – especially in key areas such as:

- ✓ stand growth and yield modelling
- ✓ timber allocation and stumpage determination mechanisms
- ✓ harvest development planning
- ✓ forest and forestry information management systems.

A clearer understanding of the relationship between stand characteristics and end product quality and value must guide forest management and harvesting development decisions. There is limited scope for reliance on intuition and local traditions in attempting to optimise the magnitude and distribution of benefits from Latvia's forestlands. Historical forest management practices must be replaced with approaches better matched to a market economy. Latvia will otherwise be less than optimally placed to successfully compete in these markets.

*Forest management at executive, management and operations levels in Latvia – both public and private sector - will be sub-optimal until such time as resource valuation more directly informs decision making at each of these levels.*

*Comprehensive valuation methodologies must include estimates on physical and economic accessibility, potential log size distribution and quality, and potential end-product conversion rates and sales values. Valuations can be based upon current growing stock but must include projections based upon employing updated stand establishment and management practices.*

*Valuation calculations would be applied at district and regional levels – and aggregated to produce national level figures. All such information would be freely available to all stakeholders.*

### **3.3 Stumpage Calculation and Collection**

Perhaps the most striking and unsupportable artefact of the former command economy is the insistence upon incorporating stumpage rates directly into higher level governance instruments.

The lengthy process of legislative change invariably eliminates any ability to adjust stumpage rates in a timely manner in response to changing market circumstances. The consequences of this include:

- ✓ in cases where end product selling prices fall
  - i) above normal state revenues at the cost of producers / sellers

ii) below “normal” profits for producers / sellers

- ✓ in cases where end product selling prices increase
  - i) below normal state revenues in favour of producers / sellers
  - ii) above “normal” profits for producers/sellers

Furthermore, in Latvia stumpage rates are currently established largely *independent of any link to rational pricing principles or market concepts*. From an economic perspective, this practice can not be rationally justified.

Ordinarily, the ministry responsible for forests, as managers of the state’s (public’s) forests, authorises the sale of forest stands to timber developers, (operators, loggers, contractors, etc.) - for a fee. The fee is frequently related to – and often exactly equal to – an “economic surplus” or “residual value” accruing to the conversion process (tree to log). This is generally determined by the following formula:

$$\text{Stumpage} = \text{Selling Price} - [\text{Operating Costs} + \text{Normal Profit}]$$

Fees for the use or harvest of any forest product - wood or non-wood - can be calculated on similar principles.

Stumpage collections usually become part of general revenues and are managed for the state by their financial ministries. They are generally not “earmarked” for specific forestry purposes, but disbursed through normal state budget processes.

Social, political and economic priorities will determine the ultimate redistribution of any government revenue collections. State budgets will ordinarily determine the amount that eventually returns to the Ministry of Forests. This funding is then available to manage the state’s forests.

Redistribution of revenues collected from an “economic surplus” (stumpage or other user fees) can take many forms. Fundamentally, an efficient and equitable approach to collecting and redistributing forestry fees recognises that many stakeholders may have legitimate claims to a share of the benefits of the republic’s forest resources – and should therefore be funded out of collected surpluses.

Unless a rational approach is used that provides “normal” returns to legitimate claimants (state, owners, labour, etc.) markets will become distorted, efficiency will be compromised, and economic rent distributions will remain inequitable.

Workers should receive fair wages. Licensees should receive a fair (“normal”) profit on their invested capital - usually measured as the profit realised by “an operator of average efficiency”. A fair profit or “normal profit” recognises the operator’s realistic costs and an amount that essentially represents the payment to his own entrepreneurial inputs for assuming the risks involved. Operators that are more efficient will realise slightly better returns - less efficient operators have lower profits and in some cases may succumb to business failure.

## 4. Macroeconomic survey

### 4.1 General Macroeconomic Indicators

Since the transition from a market economy Latvia's economic development has been affected by two major events – firstly, a near hyper-inflationary period in 1991/1992 and, secondly, a commercial banking crisis in mid-1995. In each case recovery was relatively rapid and sustained. Recovery was achieved through, strict monetary and fiscal policy, in the first instance; and in the second by implementing reserve requirements, and restrictions on deposit taking and credit granting.

A summary of selected macroeconomic indicators for Latvia is presented in Table 4.1.1 immediately below.

<i>Indicator</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998<sup>1,IX</sup></i>
GDP LVL '000,000 (current prices) <sup>1/</sup>	1,332	1,809	2034	2,469	2,796	3,443
GDP LVL '000,000 (1995 price levels) <sup>1/</sup>	2,037	2,050	2.034	2,102	2.239	
Industrial output, yearly % change <sup>2/</sup>	-29.7	-7.9	-3.9	3.2	5.7	
Construction output, yearly % change <sup>2/</sup>	-48.7	12.9	18.6	5.2	8.2	
Unemployment rate <sup>3/</sup>	5.8	6.5	6.6	7.2	7.3	8.8
Average monthly wage, LVL <sup>4/</sup>		71.87	89.50	98.73	120.03	129.99
Consumer Price Index (inflation) <sup>5/</sup>	109.2	35.9	25	17.6	8.4	4.7
Exports, LVL `000 000 <sup>6/</sup>		553.4	688.4	795.2	971.7	1,165.2
Imports, LVL `000 000 <sup>6/</sup>		695.6	923.3	1,222.9	1,512.8	1,872.2
Trade balance, LVL `000 000 <sup>6/</sup>		-142.2	-234.9	-427.7	-541.1	-662
Investment, LVL `000 000 <sup>7/</sup>		279	303	471		

Source: CSB,*a* and CSB,*b* and MOE; <sup>1/</sup> CSB,*b*, p12; <sup>2/</sup> CSB,*b*, p14; <sup>3/</sup> CSB,*a*, p78; *a*, <sup>4/</sup> MOE, p60; <sup>5/</sup> MOE,p25, av. for year; <sup>6/</sup> CSB,*a*,p60; <sup>7/</sup> CSB,*a*, p233;

The vigorous corrective measures prompted by the inflationary events of 1991 have been successful. The domestic price deflators and inflation have stabilised at levels that are more manageable. For the 12 months of 1997 inflation stood at 7.4% - amongst the lowest of similar transitional countries. One government report (MOE, 1998, p24)) projects inflation to drop to 4% over the five years to the year 2003.

Other statistics demonstrate Latvia's efforts to combat inflation. Of candidate states intent on accession to the EU, none currently have a lower inflation rate or lower projected rate for the near future. Past private consumption deflator (inflation) rates are presented in Table 4.1.2 below.

	<i>Year<sup>1/</sup></i>					
	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998<sup>3/</sup></i>
<i>Rate<sup>2/</sup></i>	34.8	26.3	25	17.6	8.4	6.7

<sup>1/</sup> Source: MOE, 1998; <sup>2/</sup> at year end; <sup>3/</sup> May 1998

The make up of GDP has also undergone significant changes in Latvia in very recent years.



A major change is seen in the distribution between public and private sector contributions to GDP. Statistics indicate private sector performance has recently dominated, growing from 34% to 51% between 1994 and 1996, and currently (1998) standing at 63% of domestic product. This is consistent with government's strong commitment to restrain its own expenditures until circumstances permit otherwise. Also consistent with this philosophy, Latvia's *total debt (internal plus external)*, as a percentage of GDP, stood at 11.9% (6.6% plus 5.3%), which was one of the lowest in Eastern Europe, and meets the Maastricht criteria for EU members. A fiscal surplus was realised in 1997 and projections for the next five years suggest deficits of only one-half of one percent – an admirable performance not matched in countries similarly in transition.

Overall, manufacturing and industry have experienced steady growth since 1995 – averaging 25.7% and 30.1%, respectively, and settling around 21.5% and 26.7% in 1997. Over the last three years, growth in wood processing has exceeded these levels (see following section).

An indication that Latvia is continuing to pursue the transition to a competitive market economy is its stated aim and implementation of measures consistent with those required for accession to the European Union.

## 4.2 Forest sector performance indicators

### 4.2.1 Manufactured output

Manufactured outputs of forest sector activities appear in three tables following below.

<i>Product</i> <sup>1/</sup>	<i>Year</i>			
	1993	1994	1995	1996
	<i>'000 m<sup>3</sup></i>			
Sawnwood, coniferous	396.6	533.5	781.4	1,129.6
Sawnwood, deciduous	48.5	50.5	58.3	86
Plywood	58	64.7	74.1	100.3
Peeled veneer	3.3	5.6	6.4	3.8
Chipped veneer	1.1	9	12.7	11.8
Fibreboard	19	16.8	22.9	33.4
Particleboard	100.5	147.8	129.8	136.5
Board and panels	.250	.160	.802	15.097
<b>Total</b>	627.25	828.06	1086.402	1,516.50

<sup>1/</sup>Source: CSB,*a*, p223

<i>Product</i> <sup>1/</sup>	<i>Year</i>			
	1993	1994	1995	1996
	<i>Tonnes</i>			
pulp	4,666	173	1,539	1,498
newsprint	-	689	2,004	2,522
Writing papers	905	171	451	268
Wallpaper base	1,157	-	700	877

Product <sup>1/</sup>	Year			
	1993	1994	1995	1996
	<i>Tonnes</i>			
Wrapping paper	1,062	271	1,924	2,029
Paperboard	965	297	985	1,075
corrugated paperboard	394	378	376	2,734
wallpaper	1,505	1,671	1,724	418
exercise & note books	142	286	536	907
Copy paper	39.8	28.3	24.5	18.1
<b>Total</b>	6,169.8	2,931.3	10,263.5	12,346.1

<sup>1/</sup>Source: CSB,a, p223

Product <sup>1/</sup>	year			
	1993	1994	1995	1996
	<i>'000 units</i>			
tables	99.8	148.6	168.3	101.7
beds	645	578	393	361
sofas	26	20.7,	15.8	12.6
wardrobes	30.7	30.4	23	11.6
Cupboards, bookcases	78.9	76.8	83.2	15.5
kitchen furniture	11.5	19.2	25.2	20.2
matches (boxes)	362	220	366	536
	<i>Units</i>			
Garden furniture (units)	500	2037	115	46
Upright pianos (units)	265	221	184	144

<sup>1/</sup>Source: CSB,a, p227

The first two tables presented above show vigorous growth in wood, wood products, and paper and allied products. The performance of the furniture sector is definitely declining in most areas – though this should not be considered a reflection of its potential.

#### 4.2.2 Trade

In 1997 and 1998 wood and wood products (excluding furniture) contributed 32.3% (MOF, 1998, 1999) towards Latvia's export earnings – a growth of 48.6% over that of 1996. Latvia's Central Statistics Bureau's statistics gives the contribution of the forest sector (including furniture, and paper and related products) to exports as 35%.

In the short-term at least, the forest sector is and will remain a major player in Latvia's economy. This may be more so than suggested by the figures presented here. Overall, this consultancy has been frequently reminded and has found evidence to suggest that the statistics measuring the performance of the forest sector in Latvia likely significantly understate the current and potential significance of that sector to the country's economy. The primary reasons given for this are:

- ✓ non-reporting by an unknown (but presumed large) number of processors (mainly due to the large number of small enterprises that are not registered)

- 
- ✓ understating reported figures to minimise taxation liabilities, employee remittances, etc.

In some regions, the percent contribution of forest sector activity to employment and incomes significantly exceeds national figures. Attempts to illuminate this issue have been initiated by this project's economic component and will only become available for further analysis later in the course of the ROL/FAO project.

Domestic demand for the end products of forest activities is limited in Latvia. Worldwide, personal "house (construction) starts" are a closely watched statistic because of their impact upon domestic wood product sales. Latvian activity in housing starts is not likely to "take off" until income levels rise and the State's participation in the provision of housing is fully privatised. EU average figures for annual housing starts (approximately 50 units per 10,000 of population) applied to Latvia would predict over 10,000 units annually – an obviously huge domestic market. The figure for Latvia in 1995 was 7 units per 10,000 of population- or about 1,700 units.

#### 4.2.2.1 *Trading partners*

The total of Latvia's trading partners in 1997 reached 144 countries. Wood product trade revolves around about a dozen key markets, which are included in representative trade statistics shown in Table 4.2.2.1.1

Because of low domestic demand, Latvia relies heavily upon export markets to sell its forest products. Well over three-quarters of the forest products produced in Latvia are exported – in recent years mainly to the EU. Exports to non-EU countries dropped to 10.5% in 1997 - 2% to CIS countries and 8.5% to others.



Until very recently, Latvia's two-way trade (exports and imports) was highest with Russia. In 1997, Russia imported a fifth of all of Latvia's commodity exports. Fluctuations in trade between these two countries will continue to persist – primarily related to evolving political and economic circumstances in the Russian Federation. Specific instances of the impact of the RF's currency crisis culminating in August of 1998 became immediately evident in Latvia. With increasing levels of trade taking place in other markets, Latvia's exposure to such crisis remains manageable.

A pronounced shift towards European markets remains in place and is growing. From 1996 to 1997 trade in wood products with the EU states has gone up 53.4% and now constitutes 54.4% of all Latvian exports to this market. The main importers of Latvian wood products are the UK, Germany and Sweden. The European Union imports 89.9% of all of Latvia's wood products.

Latvia concluded an agreement with the remaining four members of the EFTA in June of 1996. Additionally, steps to complete Latvia's accession to the European Union are clearly defined and in progress.

Latvia also holds MFN status with a number of nations with which it has bilateral agreements. Not the least of these is with neighbouring Baltic States with which progressive steps toward the creation of a Baltic common economic area have been taken. Latvia is clearly moving to integrate itself into the international arena to largely comply with prevailing accords and expectations.

### **4.3 Employment and incomes**

Target levels of public sector employment in Latvia will eventually be determined by the distribution of forest management and supervisory roles between public and private sector entities. Greater efficiencies are experienced where private sector entities assume all operational and even many management roles.

Significantly reducing current public sector employment levels in Latvia's forest service is a predictable outcome of sectoral optimisation efforts. This may not occur in one single retrenchment exercise. However, Latvia's ratio of public sector forestry employees to AAC is high. Finland and British Columbia, which have far more demanding standards of forest management, have similar sized Forest Services and manage 8 and 9 times as much AAC. Reduction in employment levels is consistent with the government's aim to reduce its public sector wage bill.

The unavoidable necessity to downsize would accompany the introduction of new institutional and management structures, proposals for which are being developed by the ROL/FAO project. The goal would be to introduce a higher level of professionalism amongst the remaining complement of staff. Old non-productive or inefficient workplace "cultures" would be replaced by more performance-oriented management and results oriented processes. In this respect, steps have been initiated to seek the participation of both public sector managers and private sector operators (licensees, mill owners, etc.) in the development of new approaches to optimising forest sector management, decreasing costs and optimising revenues.

Latvia has 2.88 million hectares of commercial forests and an annual allowable cut of 8.6 million m<sup>3</sup>, which translates to about 1 ha, or 3.4 m<sup>3</sup> per person. All areas of the country have forest cover in excess of 25% and most in excess of 50% (see following page) – though south-central and south-eastern areas are relatively less well endowed.

Especially in rural areas, forests are very significant to local economies. Forestry and its integration into Latvian social and economic traditions is long established – which fosters the desirability of continued activity in this sector. Not the least of this continued presence is in the provision of “social” wood for fuelwood purposes.

Employment levels in the country’s forestry sector have been decidedly more stable in the public sector than elsewhere. In other sectors, privatisation, rationalisation and redundancies have produced noticeable changes – prompting the question, “*With the dynamic activity witnessed in the forest sector in recent years why has so little changed in the way in which forests have been managed?*” Admittedly, within the very recent past, major changes have taken place in the senior management with the SFS.

Employment figures for recent years appear in Table 4.3.1 immediately below.

Sector	Year		
	1995 <sup>1/</sup>	1996 <sup>1/</sup>	1997 <sup>2/</sup>
<i>Forestry</i>	14,000	14,000	15,000
<i>Wood &amp; wood products</i>	15,698	20,560	23,316
<i>Sawmilling and planning</i>	9,531	11,858	
<i>Veneer, plywood, and particle and fibre boards</i>	3,745	4,103	
<i>Builder carpentry, joinery</i>	2,018	1,724	
<i>Paper &amp; paper products</i>	1,637	1,810	
<i>Furniture</i>	6,080	5,516	5,416
<i>Other</i>			4,035
<b>Total in sector</b>	52,709	59,571	47,767
;			
<sup>1/</sup> Source:CSF,h, p53-56; CSF,f, p15-16			

There is some question as to the representativeness of these figures – though they were directly extracted from the indicated sources. The forestry employment figure, in particular, was deemed to understate the actual employment level in the primary (harvesting and silviculture) sector.

Average gross wages in the forest sector (manufacturing) are above national averages (CBSa, 1997; CBSf, 1998). However, the wages of public sector employees in forestry – of which there are over 3,000 – do not meet national averages. Where wages are unacceptably low, there is considerable incentive to extract “unofficial” payments or other benefits where opportunities exist, especially where risk of detection is low, and risk of sanctions even lower.

Statistics on employment trends, overall, for Latvia are presented in Table 4.3.2 immediately below.

Table 4.3.2: Employment statistics, overall, recent years.								
	<i>year end</i> <sup>1/</sup>							
	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998<sub>t</sub></i>
	<i>Persons</i>							
<i>Employed ('000)</i>	1,397	1,294	1,205	1,083	1,046	1,018	1,037	
<i>Registered unemployed</i>		31,284	76,744	83,946	83,231	90,819	84,934	
<i>% unemployed</i>		2.3	5.8	6.5	6.6	7.2	7.0	

<sup>1/</sup> Source: CSB,c, p12

#### 4.4 Corruption

The presence of corruption is tacitly acknowledged in Latvia. Inducements (monies or otherwise) are routinely expected and paid to facilitate routine administrative or operational procedures. Anecdotal evidence was received during the consultancy that suggested specifically that, “corruption is rampant, and involves relatively significant payments” at the forest region level (“Head Forestry” level, in Latvia) and at subregional “district” levels. The subtleties of some payments included routine considerations “in kind” (meals, travel, etc.) without which approvals, etc. were delayed if not actually denied.

This report need not outline further inventiveness at public sector corruption. It is a well-known issue in former command economies and Latvia is taking steps to deal with it – including specific anti-corruption legislation.

Corruption of the magnitude suggested in Latvia can only persist with the tacit approval – if not direct participation – of senior personnel. It is naïve to think otherwise. A reorganisation of public sector forest administrations – with wide-scale retrenchment of senior personnel, and subordinates, is frequently unavoidable to extricate corruption. The consequences of corrupt practices can include:

- ✓ misdirected economic rents (lost wages, government revenue, etc.)
- ✓ inefficiencies throughout management and operations activities
- ✓ decreased forest productivity
- ✓ underutilization and wasted resources
- ✓ misapplication and misappropriation of budgetary resources
- ✓ institutionalisation of bad business and financial practices

Each of the above consequences can have a direct impact on the level of total revenues derived from forest land and timber resources – and, more importantly on driving otherwise more honest participants out of the sector.

##### 4.4.1 Worker Productivity

The macroeconomic significance of worker productivity may be most obvious by contrasting worker performance between countries or regions. The economic component will eventually undertake such studies.

Productive forestry sectors tend to stand out as low cost usually high quality producers. Their standards of performance derive from the integration of technology and training. Capital investments are common, as are expenditures on research and development. The overall consequence is that the workforce maximises its own contribution to national value-added – and thus to foreign exchange earnings, taxes, savings and investment.

In the earlier phases of transition, the potential for productivity gains from training and technology transfer may be higher than during later phases when most of the benefits may already have been realised. Early gains can arise from simple changes in operations management, staffing, monitoring and training. Which changes to adopt is dictated by the ability to financing their implementation, the prospects for their success, their level of contribution to earning or productivity gains and their relationship to other process dependent upon them.

#### 4.4.2 Training and applied research

Investment in Latvia's human capital are unavoidable – even in the short term – if productivity increases are to be realised. Even with existing fixed capital, significant increases in productivity can be predicted where training and technological know-how transfer occurs.

Research, development and applied research are the unavoidable complement to training. Especially in the achievement of maximum biological productivity of Latvia's forests – this is a critical need. There appears to be considerable opportunity to modify existing and introduce new forest establishment and stand tending prescriptions – demonstrably successful elsewhere in similar operating and biological conditions. The consequence of not training local university instructors and field level foresters in the application of these techniques is, of course, sub-optimal productivity of forest land.

#### 4.5 *Capital investment and structure*

The overall level of capital investment in Latvia has yet to return to 1990 levels. It has been increasing very slowly since reaching its lowest post-independence levels in 1993. It appears to have, however, grown marginally faster than that of GDP – which has averaged 2.4% annually since that year. Accumulated capital in the manufacturing sector was out-paced by almost 3 to 1 by the services sector. Capital investment for 1997, as a percentage of GDP stood at 19.3%. For the same year the forest products manufacturing sector's contribution stood at 3.86% of GDP.

Revaluation during privatisation gave rise to higher levels of capital - not because of growth in real investments – but because of the application of more broadly accepted accounting and business valuation practices. Additionally, the conversion in 1992 from Russian roubles to Latvian roubles (1:1), and then in 1993 from Latvian roubles to Latvian lats (200:1) also affected accounting “book” values of listed assets. Economic reforms affecting measurements of business performance had a similar effect. A further difficulty is the absence of an adequate number of years of observations to constitute a representative time-series for certain credible analysis



A summary of capital investment in forestry and in wood, paper, manufacturing and related products appears in Table 4.5.1 immediately below. The table will be completed, as additional data becomes available from conventional state sources and from participating firms as they are integrated into project activities.

Sector <sup>1/</sup>	Year	
	1997	1998 <sub>I-VI</sub>
<b>Forestry</b>		
Equipment	2,917	1812
Buildings	485	191
Other fixed assets and inventories	14	511
<b>Wood &amp; wood products</b>		
Equipment	12,263	5,744
Buildings	1,911	1,262
Other fixed assets and inventories	5,641	1,580
<b>Paper &amp; paper products</b>		
Equipment	537	1,688
Buildings	30	27
Other fixed assets and inventories	1,091	350
<b>Furniture</b>		
Equipment	2,496	634
Buildings	599	136
Other fixed assets and inventories	957	199
<b>Totals</b>	<b>28,941</b>	<b>14,134</b>

<sup>1/</sup> Source: CSB,*e*, p63; Note: series commenced in 1997

Statistics on capital investment are believed to understate the actual investment in fixed capital that has taken place in forestry and downstream processing. This is suggested by the results of an *ad hoc* survey undertaken jointly by the CSB and the SFS (CSB,*f*, 1998) which gave figures in excess of those supplied by more routine data collection procedures.

For a small number of firms, there is some evidence of high quality long-term capital investment – much, if not all of it, having foreign origins. The wood-processing sector was the second largest recipient of FDI in Latvia in 1997 – accounting for 20% of that figure. Table 4.5.2 below presents major recent or planned investment in Latvia's wood manufacturing sector.

4.5.1.1.1 Investor <sup>1/</sup>	Country	Local firm	Activity	Investment ('000LVL)	
				Current	Planned
IKEA	SWE	Incukalns Timber	Sawmilling		
Hebeda TRA AB & Thomesto Sverige AB	SWE	Vika Wood Ltd.	Sawmilling	20	--
Karl Danzer Furnierwerke	GER	Zunda	Wood articles	15	--

<sup>1/</sup> Source: MOE, 1998

The pattern of resource extraction, investment, product sales and earnings seen in Latvia is not atypical for where forest sector development is “renewed” or “opened-up” - and repeats patterns seen elsewhere.

Initial investment where access to timber resources is “liberated” or “opened – up” is typically directed towards timber harvesting, and forwarding and hauling equipment to permit the extraction and transport of logs to ports or river or rail transshipment depots. Initial investors are often established wood processors elsewhere or local log brokers. In either case, each is involved in an arbitrage transaction by buying raw unprocessed logs at relatively low prices and relatively low value-added – and selling them elsewhere at higher prices in external markets. The issue of log exports is discussed later in this report.

#### 4.5.2 Fixed capital depreciation

Latvia has a large amount of already “consumed” capital equipment that conceivably is - or shortly will be - in need of replacement. Ordinarily, firms establish depreciation accounts to which accrues annually an amount equal to the cost of future replacement purchases. Additionally, depreciation must be accounted for to avoid misrepresenting asset values, capital productivity and net earnings.

Transition between economic systems imposes the need to evaluate existing fixed (or physical) capital and establish schedules for its depreciation. In Latvia’s case, the valuation exercise was necessarily undertaken twice – once from old roubles to new roubles and once from new roubles to *lats*. This led to its own peculiar difficulties in capital appraisal exercises.

It remains to be seen how firms facing the expiration of the useful life of their sawmilling equipment, etc., especially the older former state enterprise units, will respond in terms of capital replacement (investment). The cost structure of their operations will most certainly change – potentially increasing the risk to business failure or buy-outs by more competitive firms.

#### 4.5.3 Fixed capital productivity

Except by direct contact with firms involved in various sub-sectors, it is difficult to judge the quality of those investments that have taken place in Latvia in the forest sector. It is clear that “state of the art” equipment has been installed and is operating in a number of firms. It is also not surprising that there is a reluctance to demonstrate fully the financial success of such installations. This is not unexpected in a market that is clearly open to entry by other participants, and especially when current legislation to provide statistics on productivity can be avoided without consequence or is ineffective in capturing the relevant data.

Under normal conditions, where capital productivity increases, employment levels fall. For other reasons, it is difficult to ascertain, within the forest sector, whether this has occurred. It does appear that, employment levels have not risen in conjunction with increased capital investment – which would be consistent with expectations.

The ROL/FAO project's economic component has initiated discussions with a small number of domestic producers to ascertain the magnitude of capital productivity here. Most instructive in this analysis will be a comparison of local productivity with that of other wood producing countries. This will give an initial approximation of Latvia's potential competitiveness.

#### 4.5.4 Taxation

Taxation reflects another area in Latvia where government has sought to establish sound fundamentals upon which to base economic planning and development. General taxation principles are determined by the *Law on Taxes and Dues* adopted in early 1995. The rates themselves are consistent with those found in the broader geographic region in which the country resides (see Table 4.5.3.1 below).

<i>type of tax</i> <sup>1/</sup>	<i>rate (%)</i>
Corporate income	25
capital gains ( <i>if listed</i> )	25
dividend ( <i>if repatriated</i> )	10
Value-added	18
Property	1.5 p.a. <sup>2/</sup>
Personal income	25
social security ( <i>employer + employee</i> )	29 + 8

<sup>1/</sup> Source: LPMP, 1998; <sup>2/</sup> 1% commencing year 2000

Late payments fees and re-financing rates (4% since April 1997) are also clearly specified.

In the forest sector, export taxes and import duties and dividend taxes may be most significant. Many countries impose taxes, or provide relief from taxes, to direct the development of their economies. Tax holidays are common to encourage capital inflows for investment. Taxes can be differentially applied to affect a level of protection upon local industries or individual enterprises. Even in the presence of "common markets", members may retain considerable scope to use taxation in protectionist ways – in spite of otherwise considerable harmonisation of tax policy.

##### 4.5.4.1 Export taxes, excise taxes

Taxation of exports of raw materials (or semi-processed or intermediate products) may be an effective way to promote their further local processing. Exporting roundwood, for instance, sacrifices the value-added – wages, dividends, profits – that might otherwise have accrued to domestic accounts.

An export tax affects the distribution of value added as well as its absolute level within the country. Exporters enjoy higher profits from the difference between export and domestic selling prices. Where a "residual value" stumpage calculation mechanism is in place, state stumpage receipts are lower. Wages, dividends, profits and even taxes resulting from further processing are foregone by each of their respective recipients.

Admittedly, the export of logs does also generate wages etc. – but rarely to the level of secondary and further processing activities. In addition, there is an interesting “flip side” to the issue of log export taxes!

For domestic log buyers, an export tax constitutes an implicit subsidy. It effectively depresses the domestic selling price of round wood to levels below its international selling price. Industries developing under such terms are, in part, protected from competition – and potentially less able to compete under other circumstances.

Therefore, if an export tax is not imposed the state is contributing to the exporter’s profits at the expense of its own revenues and those of the domestic processing sector. If an export tax is imposed, the state is contributing to the domestic processor’s profits at the expense of the exporter!

The solution to this issue depends partly upon the make-up of the existing processing sector. If its efficiency is nearing international levels, it may not be much affected by the price differential. Final upgrades to reach such levels could be funded by redistributing export taxes to the processing sector as loans or grants.

Where major improvements are needed to match the efficiency and quality standards of foreign competitors, a different strategy is required. Collected revenues can be assigned to specific industry development activities. The goal should be to encourage as rapid an advancement as possible as a competitive industry will maximise benefits overall and requires less state intervention than otherwise – once established.

Export quotas can also be used effectively to direct industry development – though the attendant revenues are again distributed as explained earlier. Of course, a combination of quotas and taxes may be most flexible.

#### 4.5.4.2 Value-added taxes

Latvia has adopted the basic approach of levying VAT at the point of final consumption. VAT paid for intermediate inputs is therefore subject to rebate – or may be deducted from VAT taxes that are still otherwise payable. Additionally, certain goods and services are subject to a “zero” percent tax rate. Of these, the following may be relevant to the forest sector:

- ✓ supply of goods or services outside Latvia (e.g. forest product exports)
- ✓ services related to supply of goods outside Latvia
- ✓ supply of goods and services related to the maintenance of and service of international transportation.

Given the relatively low domestic demand for wood products, VAT deductions on construction fees and repair of real estate may be highly significant. Such deductions can constitute almost a fifth of a project’s materials budget – a difference that may be substantial in calculating profitability.

Increasingly, small and medium sized enterprises are forming the backbone of development activities. Taxation policy and practices favourable to SMEs are a high priority even in very well developed economies. Latvia's value-added taxation policy with respect to SMEs may eventually warrant a review to ensure favourable treatment to this component of its economy in all sectors.

#### 4.6 Financial capital markets

The performance of Latvia's financial sector is widely accepted as being amongst the most stringently controlled in the region and amongst similar "transition" economies. For small or medium-sized enterprises, acquiring credit for is still difficult. Commonly, the reasons for this lie amongst the following:

- ✓ lack of secure collateral
- ✓ absence of markets for mortgageable assets
- ✓ limited secondary markets for commercial financial "paper"
- ✓ absence of credit performance history of applicants
- ✓ unstandardised accounting and auditing procedures
- ✓ absence of syndicating mechanisms.

##### 4.6.1 Loan interest rates

From the perspective of the applicant, the cost of money, for both short and long-term loans, may be the most significant factor in acquiring credit. Average weighted interest rates for recent years are presented below.

	Year <sup>1/</sup>					
Rate <sup>2/</sup>	1993	1994	1995	1996	1997	1998 <sup>3/</sup>
<i>short-term</i>		52	34.7	24.7	--	16.5
<i>long-term</i>		36.8	27.4	17.2	--	14.5
<i>Spread</i>		15.2	13.4	7.5		2

<sup>1/</sup> Source: MOE, 1998; <sup>2/</sup> at year end; <sup>3/</sup> May 1998

Long and short-term loan interest rates for 1997 tracked each other very closely. From January to May they dropped uniformly from around 20%-22% to about 15% - after which they ranged between about 12% to 15% to year's end.

Other interest rates have declined considerably. Discount rates for government short-term bills have fallen to the level of 3.4% - 5.6%, and the latest two-year bond issue has been sold at the discount rate of 7%. The Bank of Latvia lowered its refinancing rate to 4% in April 1997. Inter-bank money-market rates are constantly within the range of 3% - 5%.

#### 4.6.2 Savings

Bank deposits available for credit would be higher in Latvia if the proportion held as demand deposits were shifted to term instruments. In 1996 demand deposits constituted 82.5%, and 78% in 1997.

The propensity to save is lowest where incomes are not adequate or just barely so, to meet daily living expenditures. Incomes generally rise as workers' claims to their share of value-added increases. Of course, that claim can only increase if value-added increases.

In Latvia domestic savings deposits, which ordinarily are recycled as investment loans to entrepreneurs, have, in fact, dropped to half the level they held five years ago and currently stand below 10%.

Savings in deposit accounts become the source of loans to entrepreneurs to finance their investments. Increased investments should translate into increased worker productivity so that the process described briefly here is self-reinforcing, other considerations aside. The consequence overall is clearly an increase in credit availability. Representing less than 4% of the countries work force, the overall contribution of forestry sector workers to deposit accounts is not currently significant. However, as this percentage increases and as forest sector wages rise this group's significance as savers may change.

#### 4.7 Foreign Exchange

Since 1994 the *lat* has been unofficially pegged to the SDR (XDR). It has been effectively managed against speculative market activities three times since then – including in 1995 during the “banking crisis” of that year. Its performance against other relevant currencies appears in Table 4.7.1 below.

Currency <sup>1/</sup>	Year						
	1992	1993	1994	1995	1996	1997	1998
Estonian <i>krona</i> (EEK)		.0431	.0442	.0470	.0447		
Lithuanian <i>litas</i> (LTL)		.152	.137	.134	.139		
IMF currency unit (XDR)		.8819	.7997	.7997	.7997		
Pound sterling (GBP)	1.289	.882	.856	.837	.933		
Danish <i>krona</i> (DKK)	.1366	.0884	.0900	.0969	.0935		
Norwegian <i>krona</i> (NOK)	.1232	.0795	.0809	.0850	.0860		
Swedish <i>krona</i> (SEK)	.1200	.0716	.0735	.0809	.0811		
Dutch <i>guilder</i> (NLG)	.464	.308	.315	.336	.319		
German <i>mark</i> (DEM)	.528	.345	.353	.376	.358		
Japan <i>yen</i> (JPY x 100)	.675	.533	.549	.524	.486		
US <i>dollar</i> (USD)	.835	.595	.548	.537	.556		.585

<sup>1/</sup> Source: CSB,<sup>a</sup>

## 5. Value-added Forestry

### 5.1 Value-added principle

Timber and other forest land resources enter into value-added calculations at the point at which they are consumed (*point of purchase*) – either as an end product, or as an input to an intermediate process producing an end product in another sector. A resource may flow through a number of processes as an intermediate input before being purchased as an end product (or part of one). A tree, for instance, may initially be sold as a sawlog to a sawmill, then as sawnwood to a furniture manufacturer and then to consumers at the retail level. Mushrooms, game meat and fence posts, however, may be consumed by the same user by which they are acquired.

When a tree is converted into a log, it has value-added to it. Monies from the sale of the log are distributed to those ‘factors of production’ contributing to its production. The value-added component of those payments consists only of:

- ✓ labour’s wages
- ✓ capital investors and suppliers interest payments
- ✓ entrepreneurs profits (“normal profit” + unearned economic rents)

Payments for the purchase of raw materials or supplies, or principal payments, or depreciation are not included in value-added for the activity under consideration. The contribution of such items to value-added is calculated within other activities or sectors from which they are sold as end products.

Stumpage constitutes the economic rents earned by the state from the production of forest stands. It is a payment to the owners of the “forest capital” and, as such, is a legitimate contribution to value-added. Therefore, stumpage must be deducted from the logger’s own contribution to value-added to avoid double counting.

To calculate value-added for successive activities –from harvesting to subsequent downstream processing - similar deductions must be made. A sawmill consuming sawlogs can not be credited with the value-added of producing the log itself. As demonstrated, the logs’ value-added was already calculated at its point of purchase.

To calculate the total value-added derived from timber resources, the above approach is applied for each activity or product of which they are a part until their purchase by consumers as an end-product (or by an other sector as an intermediate product or input).

### 5.2 Factors affecting forest sector value-added

Value-added can be affected by any factor that impedes (directly or indirectly) maximising productivity or efficiency or the equitable distribution of economic rents. This introduces a potentially wide scope of issues to the ROL/FAO project’s optimisation goals. In respect of reorganising the structure and function of the state’s forestry authorities, priority areas directly subject to review include:

- ✓ Resource valuation (appraisal methodology)
- ✓ Resource information management systems
- ✓ Inventory (sampling plots and strategies, field measurements, growth & yield modelling and research)
- ✓ Silviculture (species selection, planting spacing, thinning)
- ✓ Harvesting (rotation age, volume recovery, removal strategy)
- ✓ Tenure (stumpage, allowable costs, profit margins, risk allowances)
- ✓ Processing (unprocessed log exports, lumber recovery, residue markets, product and market development, capital efficiency )
- ✓ Governance (laws, regulations, practices, procedures, enforcement, sanctions).

Each of the above can affect the quality of decisions made to optimise forest sector productivity and efficiency.

Less directly, any issue related to institutional structure, management, administration, budgeting, and legislation can weigh on aspects of the sector's efficient operation and potential value-added.

### 5.3 Maximising value-added

It is one thing to fell a log, put it on a truck, deliver it to a port and sell it into export markets. It is quite another to take that same log and turn it into secondary and further processed products for sale in both domestic and export markets.

Latvia's log exports in 1997 totalled 2,124 m<sup>3</sup> and a further 1,240 m<sup>3</sup> of fuelwood and chips. These volumes represent about 36% of the AAC for that year. The consequence of not further domestically processing some or all of such large volumes of roundwood may constitute a significant loss to Latvia – including foregone value-added.

Log exports do generate value-added – from all of the activities involved in producing a log of export quality and then handling and transport to the point of delivery. Thereafter, the foreign buyer continues the process of value-adding through its own processing and selling activities – all of which, of course, accrue to national accounts outside of Latvia.

It has been argued – popularly and theoretically – that log exports constitutes “exporting jobs, incomes and value-added”. Foregone value-added losses are calculated as:

$$\textit{net foregone VA} = \textit{potential domestic processing VA} - \textit{log exports VA}.$$

In cases where secondary processing facilities exist, it is not difficult to calculate this figure.

Latvia has limited efficient production capacity and questionable domestic demand. The potential volume recovery and grade quality of Latvia's timber resources



from domestic processing is yet to be fully established. Potential labour and capital productivity, end product standards and selling prices have a direct bearing upon VA calculations – and are all currently very difficult to ascertain for Latvia. In summation, it is far from a trivial exercise to estimate *net foregone VA* resulting from Latvian log exports.

Many factors determine whether further secondary or downstream manufacturing actually increases VA beyond levels realised through log exports. These include:

- ✓ absolute volume of timber supply (too little volume may prohibit economies of scale at whatever level)
- ✓ relative value of timber supply (e.g. pulp logs vs. peeler logs)
- ✓ physical and economic accessibility of timber supply (absence of roads and other infrastructure and low volumes/hectare affects both)
- ✓ type and cost of technology (determines utilisation and productivity rates, and cost/unit – all of which impact upon competitiveness and profitability)
- ✓ end product type, quality, and selling prices (affect gross revenues and therefore the potential investment and recurrent costs that could be supported)
- ✓ competitive and geographic proximity to markets (e.g. fortunately, Latvia is widely recognised as one of the key “gateways” – from west to east, and from east to west – within its geographic area).

#### **5.4 Forest sector economic contributions**

It is obvious that an enormous amount of data would ordinarily be required to accurately, or even roughly, calculate the magnitude and distribution of a given sector’s economic contributions. Statistical data processing, documentation and distribution in Latvia is well advanced. However, data *collection* problems persist and the completeness and representativeness of statistics in many areas is acknowledged to reflect this. This has hampered the project’s ability to provide an accurate “snapshot” of the sector. In that respect, the project has made considerable use of professional judgement and local experience available to it.

The figures and discussions below are based partly upon a model developed for this purpose by the project. However, they are based mostly on a reconciliation of customs volume and sales data, LSFS timber flow estimates, published prices and *Latvijas Statistika* data. The analysis aims to provide estimates of Latvia’s forest sector contributions to value-added and government tax revenues. It is simplistic in its design and relies heavily upon coarse estimates of a number of parameters and the relationships between them. This approach does, however, permit analysis and estimates, which would otherwise have remained unexplored.

Timber flow estimates within the forest sector for 1997 (from forest stand to final domestic or export sales) provide the point of commencement of the processes modelled. These were produced by forest service statistics personnel and reflect the best professional judgement and local experience in Latvia that could have been applied to

this task. The analysis can be further calibrated to incorporate greater detail and provide greater precision as data sources improve.

To facilitate comparisons, value-added and taxation estimates are presented on an LVL/m<sup>3</sup> basis. An annual harvest rate of 10,000,000 m<sup>3</sup>/annum is used for this purpose.

The project team made vigorous attempts to minimise or avoid unrealistic estimates. However, the analyses' representativeness is qualified by very limited accurate production cost data – which therefore necessitated using estimates. Another severe restriction relates to the productivity and conversion or recovery rates of specific industry processes.

#### 5.4.1 Value-added estimates

This project has used an income approach to calculating value-added, as opposed to the output or the expenditure methodologies – though all three are meant to provide the same measure.

##### 5.4.1.1 Personal incomes

An initial estimate of the forest sector's wage bill can be estimated by applying an annual average income for sector workers to the total number of workers in the sector. The averages used here are LVL 1200/annum (*cf.* Table 4.1.1) for incomes and 50,000 (*cf.* Table 4.3.1) for number of employees. This provides an estimate of LVL 60,000,000 for annual wage incomes. This translates into LVL 6/m<sup>3</sup>.

##### 5.4.1.2 Interest payments

The capital structure of the forest sector is poorly recorded in any statistics and difficult to estimate. Estimates for the interest payments component of VA were taken as a percentage of all non-income costs.

The analysis provides an estimate of LVL 9,580,000 as the total interest payments for the sector. This represents LVL .96/m<sup>3</sup>.

For the current state of the fixed capital in the sector, the above estimate may be realistic. If this is the case, however, the estimate does indicate a very low level of capitalisation. Predictably, as the sector develops, the contribution to VA from interest payments will very significantly increase.

##### 5.4.1.3 Normal profits

Current markets are not the strongest that Latvia has experienced in recent months. However, recent, published prices for higher grade sawlogs range from LVL 60/m<sup>3</sup> to LVL 105/m<sup>3</sup>. Domestic selling prices usually exceed LVL 20/m<sup>3</sup> for the

lowest grade logs. Listed selling prices for pulpwood range between LVL 17/m<sup>3</sup> and LVL 24/m<sup>3</sup>. Credible (if not actually low) estimates for average selling prices range between LVL 32/m<sup>3</sup> to LVL 35/m<sup>3</sup>.

It should be kept in mind that these profit levels are derived totally from an estimation procedure that may not be substantiated by empirical data. However, they are not unrealistic for Latvia's current circumstances and may in fact actually understate profit levels of certain operations. Further estimates for VA presented below use a 17% profit level based entirely on anecdotal observations made during the project.

Profits are not themselves a measure of value-added – though in some circumstances they afford a good indication of its order of magnitude. This is especially the case where entrepreneurs face low labour and capital input costs – and profits accrue principally to the entrepreneurs account. This is assumed to be the case for many of Latvia's producers. This analysis continues with a treatment of the questions of value-added levels by frequent reference to profit levels.

Customs statistics for total volumes and total values for 1997 for log exports of roundwood and fuelwood can be used to calculate average selling prices of LVL 32.74/m<sup>3</sup> and LVL 34.20/m<sup>3</sup>, respectively. The volume figure for these exports in 1997 was almost 3 million metres cubed. Because of the credibility of customs export statistics, at least for these figures the average selling prices are not in dispute.

Given the prevailing operating cost structure for Latvia it is credible that profit levels – to the point of sale of logs alone – of at least LVL 8/m<sup>3</sup> to LVL 15/m<sup>3</sup> are achievable from log extraction and sales – and should be almost routine for forest owners. Applying the above rationale to at least the 3,000,000 m<sup>3</sup> of roundwood sold into export markets – and for which the data is known to be credible – yields contributions of from LVL 24,000,000 to LVL 45,000,000 for 1997.

A similar examination for the sawmilling sector gives equally interesting results.

Customs statistics for sales volumes and prices for 1997 for sawnwood provide an actual average selling price of LVL 129.89/m<sup>3</sup>. Sales for 1997 reached about 2.7 million cubic metres.

Again, given the cost structure of operating in Latvia, it is likely that for the sawnwood volumes – almost 4/5<sup>ths</sup> of which is sold into export markets at the average prices presented above – actual profits per cubic metre of output material input is much higher. However, applying a 17% profit level to export sawnwood yields an LVL 22.08/m<sup>3</sup> profit for producers.

Applied to the exported volumes only, the total contribution to domestic value-added from sawmilling profits then reaches LVL 59,619,510. The project derived a sawnwood recovery factor of .47 for the sawmilling sector as a whole. Applying this gives a profit of LVL 10.38/m<sup>3</sup> per cubic metre of input raw material.

Customs statistics for other products, representing a relatively small part of total sale volumes, nevertheless, demonstrate significantly higher unit (/m<sup>3</sup>) selling prices. This is true for “deeper” manufactured products such as particleboard, chipboard,

fibreboard, and plywood and veneer. The combined export sales of the above reached LVL 76,767,000 in 1997.

Again using a 17% figure, the profit for these activities becomes LVL 13,050,390 for 1997. This study estimates that, on a weighted output basis (by product by selling price) profit levels of LVL 61.94/m<sup>3</sup> *per cubic metre of sold product* may have been realised for 1997.

Estimates for the forest sector as a whole are relatively less sensitive to these last estimates because of the small part these activities play there. Their total volume reached only 226,700 m<sup>3</sup> in 1997. It is very problematic to calculate specific raw material recovery rates for the number of “engineered” wood products included in these last calculations – especially in circumstances of evolving technology, prices, etc. However, a rough estimate of profit per cubic metre of input raw material would be LVL 20.44.

Total profits to the sector, base upon estimates for 1997, can then be summarises as follows:

<i>activity</i>	<i>Total profits (LVL)</i>
Harvesting	24,000,000 to 45,000,000
Sawmilling	59,619,510 and upwards
veneer, plywood, particle and chipboards	76,767.000 and upwards
<b><i>Totals</i></b>	<b><i>160,386,570 and upwards</i></b>

In summary, value-added contributions for the Latvian forest sector for 1997 are estimated as:

✓	wages to labour	LVL 60,000,000	or LVL 6.00/m <sup>3</sup>
✓	interest payments	LVL 9,580,000	or LVL .96/m <sup>3</sup>
✓	entrepreneurs return	LVL 160,386,570	or LVL160.39/m <sup>3</sup>

for a total of LVL 229,966,570.

#### 5.4.1.4 Economic rents

In inefficient markets, economic rents that otherwise accrue to the owners of forest resources are often “captured” by others. Owners with less perfect market information experience lower selling prices – including the possibility of foregone stumpage in the case of public forests. Intermediaries, sometimes providing the full range of development activities to the point of product deliveries, may actually be the dominant players in a sector – as well realising rent capture.

In transitional countries such as Latvia, where economic or political risk may be higher than in more mature markets, profits are also justifiably higher. Where this persists during the evolution to more stable political-economic systems, rent capture results in above “normal” profits.

One quick way for assessing the scope for rent capture is to calculate the difference between existing profit levels and normal profit levels. Though that figure need not necessarily totally represent economic rent, it does serve as a proxy or yardstick as to where its order of magnitude may lie. For example if, in fact, Latvia's circumstances dictate a normal profit level of 17% (as used in examples above) and profits of 25% are actually being realised, then entrepreneurs may be able to capture a large part of the LVL 75,476,030 difference, ( LVL 235,862,600 – LVL 160,386,570) as economic rents.

#### 5.4.2 Taxation estimates

The estimates presented below are based upon employment income (income taxes, and social security taxes) and corporate income (corporate taxes) and on estimates of non-sector production costs (value-added taxes) used during modelling procedures.

##### 5.4.2.1 *Personal income taxes*

Applying a rate of 25%, to the total incomes presented in section 5.4.1.1 above, annual state revenues from forest sector personal income taxes would be LVL 15,000,000.

##### 5.4.2.2 *Corporate income taxes*

Based upon estimates for 1997, state revenues from forest sector corporate income taxes would range upwards from LVL 57,491,650 if they were, in fact, collected.

##### 5.4.2.3 *Value-added taxes*

Estimating value-added taxes is the least precise of the estimates that could be generated by this study. No estimates will be provided until industry participants through this study make production processes and cost data available.

##### 5.4.2.4 *Social-security taxes*

The estimate for these taxes is derived from applying the appropriate tax rate (37%) to the estimates of the industry wage costs. This produces a figure, for total social-security tax payments, of LVL 22,200,000 for 1997.

## 6. Constraints to investment

A number of investors have already demonstrated a preparedness to invest in Latvia's forest sector. For these, any perception of constraints to doing so were offset by the conviction that – for the given exposure to risks of doing business in Latvia – “normal profits” could still be achieved.

Key factors critical to successful investment in Latvia's forest sector activities are summarised below.

### 6.1 Political Risk

The political climate in Latvia is stable. The perception of that stability is widespread. Latvia is a parliamentary democracy with proportional representation and a Cabinet of Ministers of twelve members. The Prime Minister, nominated by the President (his main political role), heads the CM. The third post-independence parliamentary elections passed uneventfully in October of 1998. Governments since independence have all been coalitions. Though political parties profess their ideological differences, there is significant congruence amongst coalition members and, though turf battles exist, governments have been successful in implementing transition reforms.

A very strong emphasis is placed upon macroeconomic stability and upon creating sound fundamentals and positive incentives for business development. Liberalisation and privatisation are accorded high priorities. Though Latvia has yet to accede to the EU, union directives feature largely in providing the framework and content of very much of the legislation promulgated in Latvia.

Relations with neighbouring Baltic states are positive and co-operative efforts exist on a number of political initiatives. Interest in and adoption of international treaties and conventions on trade, environment, etc. is active. External political relations are stable and positive. Internally, domestic issues are dealt with in pragmatic fashion – even where national sensitivities may auger otherwise.

It is not inconceivable that some investors may reflect upon the issues of risk related to the large non-Latvian population – specifically because of the instability seen in their former homelands. These are likely to represent a very negligible minority of sincere investors. It is far more likely that Latvia will be viewed as potentially another gateway country, such as Finland – also a Russian neighbour – that currently has the most rapid growth rates in Europe.

### 6.2 Economic Risk

Each of the three major international credit rating<sup>1</sup> agencies, providing such indicators at country/ sovereign levels, has assigned Latvia to the “investment grade”

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<sup>1</sup> Credit ratings provide indications to investors of repayment of obligations on the terms with which investments were undertaken

category. This includes the “highest credit quality” (AAA) rating and, as a minimum “good credit quality” (BBB), which implies a low expectation of credit risk and adequate capacity for timely payment of financial commitments.

Successive government’s platforms have been consistent in their commitment to economic liberalisation, and currency and price stability. Investment policy and incentives are favourably directed towards the promotion and protection of inward capital flows.

The *Law on Foreign Investment* was promulgated very shortly after independence (1991) and subsequently amended for consistency with evolving reforms. Following the *LFI*, foreign registered natural and legal entities are accorded “national” treatment - having the same rights and duties as those possessing Latvian nationality.

No sector is completely closed to foreign participation. In fact, through privatisation foreign interests have assumed a prominent position in a number of major sectors (energy, communications).

The *lat* is informally pegged to the SDR (XDR) currency basket and has been successfully supported using that mechanism – including during the 1995 currency/banking crises. Latvia’s performance criteria for its financial institutions are amongst the strictest in Europe – and are contributing to the sound fundamentals upon which its viable and vigorous financial services sector is based. Government accountability and transparency is fostered through the adoption of conventional NACE, HS and ISIC accounting classifications and practices.

Latvia’s integration into regional and international commercial and policy forums is also shaping the pattern of reform. Accession to the EU receives a high priority and is actively pursued. In early 1998, the Europe Agreement between Latvia and the EU established an association with the union (including a free trade agreement).

Investments that began dramatic declines after 1990 have been slowly climbing since 1994. A survey undertaken by OECD and the Chambers of Commerce of Sweden, USA and UK collected observations from their respective business communities. The main reasons for investing in Latvia included:

- ✓ geopolitical location and maritime conditions
- ✓ availability of high calibre human resources, and
- ✓ acceptance of foreign investment by both authorities and public.

Overall evidence suggests that Latvia’s efforts to support foreign investors’ own efforts at risk management are themselves increasingly minimising the country’s own economic risk parameters.

### **6.3 Forest Management**

Forest management and development planning in Latvia must be upgraded to reflect the same expectations and implementation of higher business standards as found in other sectors.

Experienced forest sector observers will recognise very quickly the decidedly inadequate planning methodologies prevailing in Latvia. During the course of this consultancy, it was an issue voiced by many public and *every* private sector interest contacted. Both local and foreign investors will discount the value of investing in Latvia to reflect the foregone losses attributable to poor forest management practices. Though the lost increment may not be exactly calculable – existing practices pronounce lost productivity.

There is evidence, as discussed earlier in this report, that forest management practices fail to capture fully forestland's earning potential. Not the least consequence of this is abnormally low stumpage rates and revenues. This consultancy witnessed directly the absence of common valuation and appraisal methodologies to the evaluation of forestland business proposals and decisions. Latvia will decidedly fail to develop and capture the economic rents inherent in its forest land resources if an appropriate "business culture" is not implemented and supported within its forestry authorities.

Not the least of the above problems deals with forest mensuration techniques and information systems. Forest establishment and tending practices are based on stand sampling and modelling techniques and on historical "traditions" that have been upgraded elsewhere decades ago – and should be adapted to Latvia's use.

#### **6.4 Forest tenures**

The second most criticised issue provided by local operators and investors during this consultancy was that of the arrangement under which the state provides access to forest stands.

It warrants repeating that loggers are innovative and can succeed under a variety of circumstances – as long as "normal" profits are obtainable. *What they find least acceptable is an inability to plan.*

Latvia's forest service should make use of a wide range of tenure arrangements to attract a similarly wide range of operators. This increases the level of participation overall and will promote the development of distinct "phase contractors" specialising in given forestry activities. This approach has been successfully applied in many areas to maximise the scope for increased efficiency throughout the sector – from stump to mill yard.

What current tenure arrangements lack most, especially the longer term ones, is an ability to plan an operator's road building and logging activities adequately. Realistically, each tenure holder should have accurate credible estimates for the species, volumes and specific location of cut-blocks (coupes, etc.) – for each of the next five years of logging (updated annually). Beyond that the general location of his operations for the next ten years should also be known – and at a less precise level, even the next twenty years.



It is far from acceptable for an operator to be directed to a given year's logging areas only as the logging year progresses from cut-block to cut-block (unfortunately, not an uncommon occurrence).

Another common occurrence is the less than consistent manner of assigning specific forest management roles to tenure holders (also previously discussed). During this consultancy, many operators expressed concern over their inability to assess their competitiveness in the absence of a credible and consistent methodology for allocating timber volumes and the associated tenure terms. Under more competitive circumstances – with less robust and more “normal” profit margins – industry's expectations for a more business like treatment will be greater. Neither state forest authorities of tenure holders is well served by current tenure arrangements.

### **6.5 Stumpage**

Details on the macroeconomic significance of stumpage have been presented in an earlier section.

Only the fact that “... *stumpage will be collected* ...” should be stipulated and codified in legislation. Specific stumpage calculation principles should be prescribed in regulations following the *law*. The actual methodology for stumpage calculation should be articulated in lower hierarchy of instruments (e.g. practices or procedures manual). Actual “*stumpage rates*” should be calculated/ re-calculated at least quarter-annually and appear in a “*schedule*” attached to each and every contract entered into between the state and a logging developer.

Again, with profit margins relatively robust, it may have been forgivable to not approach the issue of stumpage and its calculation from a more openly professional and financially responsible basis. Undoubtedly, state revenues have been less than what they should have been – though this should no longer be considered acceptable.

Continued attraction of investment funds into the forest sector is a likely prospect given the relatively underdeveloped state of Latvia's forest sector. It would serve the nation's economic development interest well to rectify the confusion and capriciousness currently surrounding the issue of stumpage.

The above forestry related issues have been further heightened by concerns of the impact upon all tenure arrangements and timber supply of a possible pulp producer – whose anticipated requirements are estimated to be between 2.4 and 2.9 million m<sup>3</sup> annually!

The FS has little choice but to rectify its forest management, stumpage tenure arrangements if it is to continue to attract investors – local or otherwise – and to optimise forestland resource benefits thereby.

### **6.6 Human resources**

Investments in physical capital in the forest sector are predicated somewhat on an efficient public sector – private sector “*interface*” wherever these must work together to reach their respective objectives. It does not serve the state well to have its interests represented by under-trained under-utilised staff.

The demands of transition have necessitated a higher level of performance from personnel in all industrial sectors in Latvia – public and private. This is equally the case for forest sector professionals and workers. The relevant concepts, however, are relatively easy to acquire. Upgrading of skills may be most limited – in the short to medium term - by funding – and there is no expectation that this will not occur. Planning and project preparation in some areas of HR development has already commenced.

More generally, from an investment risk perspective, observations surveyed from the expatriate business community suggested that a higher level of competency was also required to ensure consistent interpretation of legislation and its application – particular in terms of taxation. Interpretation and application of bilateral tax treaties were of particular concern.

## **6.7 Financing**

Inadequate investment by the state in its forestland “capital” is of direct concern to investors. This is particularly the case for long-term agreement holders who would ordinarily be assuming similar responsibilities and cost on what is also state land – on the state’s behalf.

It is clearly a state role to ensure the efficient collection and distribution of what are clearly State revenues. The Forest Development Fund, one of a number of “*special*” state budget allocations, is both collected and disbursed directly by the Forest Service.

The right of the state to collect and disburse revenues is normally perceived as its sovereign duty – and not commonly delegated to the extent that it has been in the case of the FDF. Overall state revenues are very likely to increase – from stumpage (assuming higher value-added), from fines (upon improved enforcement), and license fees, retained security deposits, etc. It is prudent for the state, if not fiscally imperative, to assume a more direct role in the receipt and disbursement of such funds.

Issues related to stumpage calculations and forgone state revenues (discussed earlier) are relevant to funding levels of state forestry agencies and activities. It need only be added here that, investor confidence in the state’s ability to meet its responsibilities in respect of its forest land resources is subject to the states committing adequate funds to that role.

## **6.8 Globalisation and competitiveness**

### **6.8.1 Globalisation**

A pervasive development in open economies in recent years is the ease with which it is now possible to engage in virtually “borderless” transactions within a number of markets – including commodities such as forest products.

Trends towards large associations of trading countries or common markets appear to be growing. Even in specific industries, alliances are being formed which – though not strictly monopolistic in nature – have similar impacts. This is very visible, for instance, amongst air carriers, financial service institutions, communications, media and automobile manufacturers.

Resisting the “natural” tendencies of transnational expansion invites the risk of foregoing legitimate investment that may otherwise also be consistent with broader national social and economic development objects.

The loss of direct control over globalisation processes can, however, also lead to the risk of marginalisation and instability – by bidding down wages, extracting tax concessions, and disregarding social and environmental consequences while harnessing local resources for production activities. It is instructive to assess these risks by comparing the process of globalisation to the earlier intentions and activities of colonialism – with which it is sometimes loosely compared (neo-colonialism).

Globalisation is nurtured through advances in technology, increased mobility of production inputs (entrepreneurship, finances, labour) and its ability to penetrate markets otherwise inaccessible. This has been most dramatic in developing countries and those in transition. The results may be considered mixed, with both positive and negative results – but governments are prudent to examine its ramifications closely.

### **6.8.2 Competitiveness**

The general impression on observing the progress of some components of the Latvian forest sector is very positive. Significant upgrades have taken place in many of its mills. Manufacturing standards and product quality is improving and marked periods of growth have been evident. Many aspects of the development of the sector have the appearance of being directed by movement towards increased competitiveness.

Within the forest sector (as with others), mills and processing centres were acquired by their current principals (owners) from the state in early post-independence redistribution programmes. For a number of reasons, it was a sound strategy to provide for the continuity of these plants – regardless of the initial productivity and efficiency of operations. Effort to now increase the efficiency of these mills will only add to the successes thus far achieved by the sector and to maximise their competitiveness in the long term. The truly efficient operations will prosper in freely competitive markets. Less efficient ones will be less successful and some will fail.

Certain forest sector participants have expressed preparedness to support the development of a competitive sector. The full measure of this expression of preparedness, however, can only be gauged once the sector has been exposed to more realistic competitive circumstances. Ultimately, the threat of losing favourable access to timber resources, or market share or even mill ownership under more competitive arrangements may affect owners' interest in further liberalisation – and support for such measures will evaporate!

Without a liberal attitude in regards to competition, it will take much longer for Latvia to eventually meet – and, perhaps, surpass – the standards and criteria necessary to effectively continue to compete in existing international forest products markets.

Within international markets, integration is taking place – *backwards* (with providers of raw materials, equipment and supplies), and *forwards* (with downstream processors, transport and sales services) – creating huge complexes of enterprises able to capture significant regional advantages and posing significant challenges for more independent operators in their region. In Latvia's geographic region, the Finnish forest sector presence (with an AAC of approximately 65 million m<sup>3</sup>/annum) through Stora/Enso, Metsä, and UPM-Kymmene is a prominent example of dominance in this way.

Within the forest products sector, European participants are decidedly active in establishing links to increase their competitiveness. However, and perhaps surprisingly, there is a remarkable degree of independence amongst firms. Alliances are not static and are subject to dissolution and realignment – especially where they result in improved efficiency, reduced costs and greater market penetration. Even the Finnish examples given above somewhat regularly undergo realignment.

The immediate geographic area wherein Latvia is situated is one of the world's most developed and competitive non-tropical forest products areas – in solid wood, reconstituted (engineered) wood products and pulp and paper products. Only North America's forest sector is similarly developed – in terms of comparable size and level of technology. Whether this sword has two edges or not will rest with how truly competitive the Latvian forest sector actually becomes.

For Latvia, the significance of having to operate in such a regional market place is apparent.

Not maximising sector efficiency will lead to eventual displacement by other regional operators. Compliance with trade conventions (WTO, EU, etc.) and its own "national" treatment of foreign investors almost certainly ensures that this will take place. Clearly, Latvia can not reserve its timber resources to the exclusive use of Latvians. The only remaining option to maintaining or increasing "competitiveness" then becomes the loss of operating independence through strategic sectoral alliances – Latvian or otherwise.

Even domestic markets, when they do develop, can end up being served by more competitive non-Latvian producers – as the same conventions just referred to above also open Latvian borders to such traffic. In addition, with accession to the EU

almost a foregone conclusion, the scope for protecting the domestic forest products sector from external interests is significantly reduced – if not totally spent.

The good news is that Latvia shows an overwhelming preparedness to tackle and contain this challenge by continued liberalisation and competitive restructuring and rationalisation.

## 7. Conclusions

With respect to the forest sector, some observers would say that Latvia, “... *has a long way to go* ...” – others, that Latvia, “... *has come a long way* ...”. This report favours the last perspective, as it more accurately captures the significance of the progress that has been achieved in recent years – and the measures that have already been initiated to continue and advance that process.

The brief conclusion presented below should be framed in the context of the constraints to further analysis arising from limited data sources and statistics and, as yet, limited participation by private sector interests. In this respect, what follows may more accurately be considered mid-term observations rather than conclusions.

Major conclusions having macroeconomic relevance to issues related to the optimisation of Latvia’s forest sector, in general, and its forest management structures and institutions include:

- ✓ Latvia’s forest management practices must be upgraded to maximise the productive capacity of its forestlands.
- ✓ Stumpage rates and revenues, if calculated according to a more conventional market oriented approach, would be higher.
- ✓ Forest harvesting development planning is inadequate to support the planning needs of both the LSFS and the private sector.
- ✓ The range of tenure arrangements should be broadened to accommodate a wider range of operators.
- ✓ There are existing private sector operators who can form the basis of an internationally competitive manufacturing sector.
- ✓ Latvia’s macroeconomic environment is progressively creating a “level” playing field for forest sector investors. Associated governance and institutional arrangements will most favour operators capable of operating under internationally competitive terms. The normal rationalisation that this climate supports will “weed out” less efficient operators and optimise forestland benefits overall.
- ✓ A major effort is necessary to revitalise the FS human resources component. This is especially the case at the Regional and District level.

It is only possible to provide a rough estimate of the forest sector’s contributions to Latvia’s national economy. This will remain largely so until a more statistically rigorous and credible analysis accounts for Latvia’s timber supply, the products it produces, and the associated manufacturing and sales costs.

It is possible to say that the country’s forest resource currently represent, at their present stage of development, a major contribution to its economy. This will continue to

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be the case for several years to come. Because of the potential rates of growth that can be realised here, the forest sector's contribution will increase in both absolute and relative terms. Its own output will likely grow rapidly as the FS addresses a number of critical issues – many of which have been discussed throughout this report. Its percentage of national output overall, will also grow – at least until a greater number of other sectors' rates of growth overtake that of the forest sector's. More exact estimates of the trajectory of the sector's development may be possible towards the end of this project.

## Annex I: Glossary

Claim	A challenge, originating from a purchaser, disputing the conditions under which a supplier's shipment was received. Sources of complaint can include; timing of delivery, unacceptability of quality, unacceptability of grade and species distribution, and variance between invoice and contracted price.
Conversion Return	The monetary gains that arise when converting a resource (e.g. forests) into sellable end products (e.g. wood). It is normally distributed to owners (as stumpage payments) and to those factors of production that contributed to the "conversion" activities (as dividends, wages and taxes).
Factor of Production	A term used in economics to describe the inputs (financial capital, equipment, buildings, labour or land) to production activities. One distinguishing characteristic amongst factors of production is their 'ownership' and the perceptions of what constitutes a fair distribution of the gains or earnings (profits, wages, dividends, etc.) that arise from their respective use.
Horizontal Integration	Extending a production process by adding more of an already installed level of capacity. Adding a second primary saw to an already installed one is an example of horizontal integration.
Initial Resource Endowment	The geographic distribution of resources amongst populations. Local areas, regions and nations can be either resource rich or resource poor.
Macro-economics	Activities and instruments meant to support the achievement of government's economic, social and political objectives. The State has the largest role for direct intervention in these arrangements - though not commonly independently of other social actors. Macro economic issues include fiscal and monetary policy, labour and business codes, trade and currency regulations, taxes and excise etc.
Micro-economics	Economics related to production activities. Commonly referred to as the economics of the firm. Micro-economic issues include production technology and costs, efficiency, product and market development, organisation development and management, etc.
Primary sector	The participants, infrastructure, and activities directed towards the establishment of forest crops, their harvest, and the transport of roundwood to their point of subsequent



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	conversion (manufacture) into wood products, or, their shipment as roundwood exports.
Private sector	That segment of society distinguished by its collective goal of maximising their return (profits) from the application of their capital and land to commercial activities.
Secondary sector	The manufacture of wood, paper and related products from roundwood.
Stakeholder	An individual or group that has an interest in the decision, action or status of an outcome. The outcome may be considered either positive or negative depending upon the viewpoint of the stakeholder.
Stumpage	The price paid by a harvester to the owner of a forest for the volumes harvested. Historically it was calculated as a given amount per “stump” multiplied by the number of stumps left after logging. Today a wide range of sophisticated methodologies may be used – though most are based upon a “conversion return” principle. (Initial usage originates from western North America.)
Tenure	An operational and administrative arrangement for assigning or user rights to an individual or group or an incorporated entity. Tenures may be legally formalised and documented or they may be conventionally accepted as ‘customary’ or ‘traditional’. Depending upon the country each form may be accepted as “legitimate” and defensible through legal processes.
Vertical Integration	Adding an earlier (background integration) or later (forward integration) phase of production that is not currently part of an enterprise’s sequence of operations. Adding remanufacturing, finger-jointing, planing and sanding units, or furniture manufacturing to primary manufacturing are examples of forward vertical integration. Adding log transport or saw-blade manufacturing would be examples of backward integration for the same mill.

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## Annex II: References

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