Financial Deepening Indicators And Economic Growth In

This is the United Nations definitive report on the state of the world economy, providing global and regional economic outlook for 2020 and 2021. Produced by the Department of Economic and Social Affairs, the five United Nations regional commissions, the United Nations Conference on Trade and Development, with contributions from the UN World Tourism Organization and other intergovernmental agencies.

Master's Thesis from the year 2009 in the subject Business economics - General, grade: A, Vanderbilt University (Graduate Program in Economic Development), course: Masters in Economics, language: English, abstract: This study explores the relationship between financial growth and economic development in India using time series data over the period 1950-2007. The majority of the previous studies on this subject have used cross-sectional data, which may not address country specific issues. In addition, many studies used either OLS technique of estimation or bi-variate causality test and may, therefore suffer from the omission-of variable bias. This study attempts to examine the dynamic relationship between financial growth and economic development by including a range of financial variables like, quasi money for monetization, domestic credit for financial intermediation activities and bank asset for financial intermediary institutions. The casual relationship between economic development and financial growth indicators was examined with the help of Granger-Causality procedure based on Unrestricted Vector Auto Regression using the error correction term. The result from the cointegration tests indicates that financial development has a long-run equilibrium with economic growth. The financial sector and real sector move and evolve together in the same direction. The error correction model suggests that, in the short-run, the output variable is the only effective adjustment factor in the system that responds to the fluctuations of financial measures and domestic capital formation. On the other hand, the response of financial intensities and investments are sluggish adjustments that correct the deviation from equilibrium. In nutshell, this study shows that India's financial development and economic growth are positively correlated; the process of economic development is not sustainable without the contributions of the financial sector and vice versa.

Over a decade has passed since the collapse of the U.S. investment bank, Lehman Brothers, marked the onset of the largest global economic crisis since the Great Depression. The crisis revealed major shortcomings in market discipline, regulation and supervision, and reopened important policy debates on financial regulation. Since the onset of the crisis, emphasis has been placed on better regulation of banking systems and on enhancing the tools available to supervisory agencies to oversee banks and intervene speedily in case of distress. Drawing on ten years of data and analysis, Global Financial Development Report 2019/2020 provides evidence on the regulatory remedies adopted to prevent future financial troubles, and sheds light on important policy concerns. To what extent are regulatory reforms designed with high-income countries in mind appropriate for developing countries? What has been the impact of reforms on market discipline and bank capital? How should countries balance the political and social demands for a safety net for users of the financial system with potentially severe moral hazard consequences? Are higher capital requirements damaging to the flow of credit? How should capital regulation be designed to improve stability and access? The report provides a synthesis of what we know, as well as areas where more evidence is still needed. Global Financial Development Report 2019/2020 is the fifth in a World Bank series. The accompanying website tracks financial systems in more than 200 economies before, during, and after the global financial crisis (http://www.worldbank.org/en/publication/gfdr) and provides information on how banking systems are regulated and supervised around the world (http://www.worldbank.org/en/research/brief/BRSS).

The purpose of this present research is to explore the relationship between fina ncial sector development and economic growth. Since financial development is a m ultifaceted concept, the question of whether the development of financial market s leads to economic growth or whether it is more of a consequence of a growing eco nomy is addressed. Moreover, this project examines this central relationship in the context of one economy, that of Lebanon. The project utilizes secondary theoretical and emp irical literature to draw general conclusions on the existing state of thought o n the emphasis of the role of financial development in generating sustained growth. The trend in the literatur e is that the development of financial markets and institutions and a financial system that does a good job of delivering essential services, is a critical part of the growth process and not just a passive response to economic development. Furthermore, Lebanon is specifically examined in terms of its financial structur e, level of financial sector development and economic performance. Primary resea rch is carried out empirically through regression analysis of the effect financi al development plays on the economic development of Lebanon. The results show that in the Lebanese context, financial sector develop ment does in fact have an impact on economic growth. The indicators of financial sector development used in the tests collectively impacted the observed changes in econ omic growth. However, not all of the financial development indicators used were significant, which does not completely conform to the results of the majority of cross- country studies carried out in the literature. Thus, the findings of this paper can be r egarded as being a preliminary step to further investigations. Lastly, the study proposes areas for further research and policy recommendations that the Lebanes e government and key financial sector players should consider in order for the full effects of financial development measures to take form.

First published in 1999, this volume examines the role and effects of financial liberalisation in ten deregulated Asian developing countries including Indonesia, Malaysia, Myanmar, Nepal, the Philippines, Singapore, South Korea, Sri Lanka, Taiwan and Thailand. These areas experienced significant financial and economic changes between the ‘financially repressed economies’ of the 1970s through to the 1990s. Muzafar Shah Habibullah approaches this issue in two parts. Part 1 provides empirical evidence of

relationships between monetary aggregates, nominal income and price level. In part 2, he offers an early attempt to evaluate the Divisia monetary aggregate as an alternative to the Simple-sum aggregate as an indicator for the financial and economic situation of Asian developing countries.
This paper reexamines the empirical relationship between financial development and economic growth. It presents evidence based on cross-section and panel data using an updated dataset, a variety of econometric methods, and two standard measures of financial development: the level of liquid liabilities of the banking system and the amount of credit issued to the private sector by banks and other financial institutions. The paper identifies two sets of findings. First, in contrast with the recent evidence of Levine, Loayza, and Beck (2001), cross-section and panel-data-instrumental-variables regressions reveal that the relationship between financial development and economic growth is, at best, weak. Second, there is evidence of nonlinearities in the data, suggesting that finance matters for growth only at intermediate levels of financial development. Moreover, using a procedure appropriately designed to estimate long-run relationships in a panel with heterogeneous slope coefficients, there is no clear indication that finance spurs economic growth. Instead, for some specifications, the relationship is, puzzlingly, negative.
Recent events, such as capital flow reversals and banking sector crises, have shaken faith in the widely held belief in the benefits of greater financial integration and financial deepening, which are typical in advanced economies. This book shows that emerging economies have often weathered the storm best despite the supposed burden of ‘weak institutions’. It demonstrates that a better policy framework requires reliable indicators of vulnerability to financial instability, as well as improved policy tools and automatic stabilizers that anticipate and limit the vulnerabilities to financial crises.
This book examines the impact of financing on Africa’s economic development. By exploring various financial instruments including the role of alternative sources of funding like migrant remittances and illicit flows, it analyses the role of financing for Africa’s macroeconomic development and other development indicators such as infrastructure, transport, global trade, industrialisation, social services, external indebtedness and governance. By presenting and examining case studies on various African countries and regions, the respective contributions investigate the capacity of institutions to facilitate and structure the economy’s funding activities, and to strengthen the ties between finance and development. Furthermore, they discuss various regional aspects, such as the integration of infrastructure, harmonization of fiscal policy, integration of financial markets, and the facilitation of intra-regional trade and movement of capital. Given its scope, the book will appeal to scholars of economics and development studies with an interest in the economic development of Africa.
"While substantial research finds that financial development boosts overall economic growth, we study whether financial development disproportionately raises the incomes of the poor and alleviates poverty. Using a broad cross-country sample, we distinguish among competing theoretical predictions about the impact of financial development on changes in income distribution and poverty alleviation. We find that financial development reduces income inequality by disproportionately boosting the incomes of the poor. Countries with better-developed financial intermediaries experience faster declines in measures of both poverty and income inequality. These results are robust to controlling for other country characteristics and potential reverse causality"--National Bureau of Economic Research web site.
This paper contributes to the literature by looking at the possible relevance of the structure of the financial system—whether financial intermediation is performed through banks or markets—for macroeconomic volatility, against the backdrop of increased policy attention on strengthening growth resilience. With low-income countries (LICs) being the most vulnerable to large and frequent terms of trade shocks, the paper focuses on a sample of 38 LICs over the period 1978-2012 and finds that banking sector development acts as a shock-absorber in poor countries, dampening the transmission of terms of trade shocks to growth volatility. Expanding the sample to 121 developing countries confirms this result, although this role of shock-absorber fades away as economies grow richer. Stock market development, by contrast, appears neither to be a shock-absorber nor a shock-amplifier for most economies. These findings are consistent across a range of econometric estimators, including fixed effect, system GMM and local projection estimates.
In 2011 the World Bank—with funding from the Bill and Melinda Gates Foundation—launched the Global Findex database, the world's most comprehensive data set on how adults save, borrow, make payments, and manage risk. Drawing on survey data collected in collaboration with Gallup, Inc., the Global Findex database covers more than 140 economies around the world. The initial survey round was followed by a second one in 2014 and by a third in 2017. Compiled using nationally representative surveys of more than 150,000 adults age 15 and above in over 140 economies, The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution includes updated indicators on access to and use of formal and informal financial services. It has additional data on the use of financial technology (or fintech), including the use of mobile phones and the Internet to conduct financial transactions. The data reveal opportunities to expand access to financial services among people who do not have an account—the unbanked—as well as to promote greater use of digital financial services among those who do have an account. The Global Findex database has become a mainstay of global efforts to promote financial inclusion. In addition to being widely cited by scholars and development practitioners, Global Findex data are used to track progress toward the World Bank goal of Universal Financial Access by 2020 and the United Nations Sustainable Development Goals. The database, the full text of the report, and the underlying country-level data for all figures—along with the questionnaire, the survey methodology, and other relevant materials—are available at www.worldbank.org/globalfindex.
" The empirical literature on finance and development suggests that countries with better developed financial systems experience faster economic growth. Financial development-as captured by size, depth, efficiency, and reach of financial systems-varies sharply around the world, with large differences among countries at similar levels of income. This

paper argues that governments play an important role in building effective financial systems and discusses different policy options to make finance work for development."--World Bank web site.

This study examines the empirical relationship between financial development and economic growth. The employed data set includes a representative selection of 60 countries over the period 1965-1997. To test the empirical relationship between finance and growth, I have used OLS regressions and three indicators of financial sector development. These indicators measure the financial sector by size (liquid liabilities) and activity (credit provided to the private sector and credit by banks). In accordance to earlier research, the financial sector plays an important part in economic growth as it can reduce the cost of acquiring information, conducting transactions and facilitating savings mobilisation. By providing these services, the financial sector can enhance resource allocation and increase aggregate savings. The study identifies three sets of findings. First, I run regressions by using financial indicators averaged over the period 1965-1997, and I find a positive statistical relationship between financial development and economic growth. The second finding is based on regressions with financial indicators measured in the initial year 1965. These regressions support the first findings, in addition to testing for the long-run effects and checking for causality. While the two first findings are in accordance with earlier studies, the third finding adds to previous research by controlling for the level of economic development. In the last regressions, the sample has been separated into different income groups, interacting with the three financial variables. Financial sector development seems to have at least the same importance in developing countries as in industrialised countries, especially concerning increased credit allocated to the private sector. Credit provided to the private sector seems to follow a path with increased influence associated with a decreased income level, and seems to be important for convergence and a country's economic growth.

In the wake of the financial crises of the late 1990s, there was a surge of interest in the systematic assessment of financial sectors, with a view to identifying vulnerabilities and evaluating the sector's developmental needs. Consequently, there has been an increased demand from financial sector authorities in many countries for information on key issues and sound practices in the assessment of financial systems and the appropriate design of policy responses. In response, Financial Sector Assessmsnet presents a general analytical framework and broad guidance on approaches, methodologies and key techniques for assessing the stability and development needs of financial systems. It synthesizes current global sound practices in financial sector assessment.

Financial inclusion is considered as a befitting support to help in economic development. This inclusion's gaining currency far and wide as different researchers and policymakers try to probe further into the matter along with its direct or indirect association with the economic and other (external) indicators. The designed pattern of this study underscores financial inclusion in the developed and developing states along with those macro-economic indicators and other factors that (somehow) influence this level of inclusivity. This study examines the effect of economic indicators (GDP, and inflation), human development (HDI), and governance factors (WGI) on financial inclusion; it further draws a comparative analysis for both the developed and developing countries. To assess the healthiness of this level of this inclusion in any state, Financial Access Survey (IMF), along with economic variables i.e., GDP and inflation, and different indexes (HDI and WGI) have vastly been assessed to determine the level of their influence. With the help of factor analysis through PCA, a single factors been determined to envisage its association with the macro-economic indicators and indexes. In the context of comparative and collaborative analysis, the dynamic panel regression (GMM) has been performed. The results of the t-test of equality of means represent that the high quality institutions strengthen the monetary side of the country and, thus, its level of financial inclusion in comparison to the low quality institutions. Moreover, a high level of HDI provides a certain entry into the financial markets and purely benefits the level inclusion and economic development. The comparative results of this study indicate that financial inclusion is directly influenced by GDP, HDI, and Governance within the economy, however, inflation does show a negative association with the developed and developing states. Empirical and theoretical evidences suggest that financial inclusion per se doesn't drive the better economic development but also those external factors that play a vital role in a cogent way to bolster the overall economic and monetary development in any state.

Abstract: My dissertation explores the impact of financial development, as well as regulatory changes in the financial sector, on economic growth. Recent literature on growth has often focused on the importance of financial intermediation and institutional quality. Advocates of financial development say that the development of the banking sector and stock markets increase the financing available to firms, raising productivity. The "institutions hypothesis" proponents suggest that institutions jointly determine the growth rate and the policy choice, while policies themselves bear no causal connection to growth. Such hypothesis is difficult to test empirically because the change in institutional quality is, with a few historic exceptions, very slow. For the most part, therefore, a country's economic performance can end up being attributed to a random cause. Using a cross-country data set and numerous financial indicators, institutional quality variables and growth measures, I find that this is not true of financial development. Financial variables have a significant effect on growth that is distinct from that of institutions like private property and rule of law. I also consider this issue in the context of the fifty U.S. states. States differ with respect to financial indicators like the number of banks, assets, equity, loans and deposits. They also vary in terms of their regulatory environments. States like Delaware, Texas and Nevada have very high scores for economic freedom; Mississippi, New Mexico and West Virginia have very low ones. The results again underscore the importance of financial deepening in order to achieve economic growth. Taking up from this point, the final essay studies the impact of U.S. banking deregulation on growth. Many states relaxed restrictions on intra-state bank branching beginning in the early 1960s, both by allowing bank holding companies to convert subsidiaries into branches and by permitting statewide de novo branching. This increased competition in the banking sector forced banks to become more efficient. The existing literature suggests that one of the channels through which this worked was bank lending. Different industries have varying degrees of dependence on external financing, and industries that have greater dependence should grow faster in the post-deregulation period. Using a panel data set, I find this not to be the case for the U.S.; industries that borrow less from banks actually grew at a faster rate after deregulation. This could reflect commercial banks losing market share to other sources of external financing, the general decline in the U.S. manufacturing sector and the terms of

trade moving in favor of agriculture. I also consider the effect of deregulation on various banking indicators and find the strongest impact to be on the number of commercial banks operating in the state. Contrary to existing research, these regulatory changes slowed down growth in the number of bank branches and offices, as well as other measures of bank performance like assets, equity, loans and deposits. This suggests that the gains from deregulation are short-lived, and also indicate unprofitable smaller banks shuttering their operations and the emergence of credit unions and other alternatives to commercial banks.

This new database of indicators of financial development and structure across countries and over time unites a range of indicators that measure the size, activity, and efficiency of financial intermediaries and markets.

A country's level of financial development and the legal environment in which financial intermediaries and markets operate critically influence economic development. In countries whose financial sectors are more fully developed and whose legal systems protect the rights of outside investors, economies grow faster, industries dependent on external finance expand more quickly, new firms are created more easily, firms have more access to external financing, and firms grow faster.

This study investigates the relationship between financial sector development and progress in reaching the Millennium Development Goals (MDGs). It assesses the contribution of countries' financial sector development to achieving the MDGs. The focus is on the relationships between financial development and economic welfare and growth, and the following four MDG-themes: Poverty, Education, Health, and Gender Equality. In doing so, the book reviews the theoretical channels, surveys existing empirical evidence - both cross-country and case study evidence, and provides new evidence. Financial Sector Development and the Millennium Development Goals finds that financial development is an important driver for economic welfare in that it reduces the prevalence of income poverty and undernourishment. In addition, new evidence is provided of a positive association between financial development and health, education, and gender equality.

Rethinking Financial DeepeningStability and Growth in Emerging MarketsInternational Monetary Fund

Deregulation of the financial system often proceeds in tandem with macroeconomic stabilization centered on monetary and other financial targets. This paper presents a model where there may be conflict between these processes. The indicator properties of some financial variables may be rendered unstable by the liberalization process. However, other, carefully selected financial aggregates may contain information about economic activity that is useful to policy makers during stabilization. Data from a group of selected African and Asian countries is examined. These are broadly consistent with the predictions of the model, while highlighting the importance of macroeconomic and financial stability for the success of financial reforms.

The World Bank considers financial inclusion to be an enabler for at least 7 of the 17 United Nation’s sustainable development goals (SDGs). Financial inclusion, with its associated policy implications, is an important issue for ASEAN. This book examines the economic effects of financial inclusion. It explores issues surrounding measurement and impact of financial inclusion. The book looks at various, salient topics including measurement of financial inclusion, the impact of (various indicators of) financial inclusion on development outcomes and macroeconomic volatility using aggregate data, as well as the effects of financial inclusion on poverty and development outcomes using micro data.

This paper examines how financial development affects the sources of growth—productivity and investment—using a sample of 145 countries for the period 1960-2011. We employ a range of econometric approaches, focusing on the CCA and MENA countries. The analysis looks beyond financial depth to capture the access, efficiency, stability, and openness dimensions of financial development. Yet even in this broad interpretation, financial development does not appear to be a magic bullet for economic growth. We cannot confirm earlier findings of an unambiguously positive relationship between financial development, investment, and productivity. The relationship is more complex. The influence of the different dimensions of financial development on the sources of growth varies across income levels and regions.

The global financial crisis experience shone a spotlight on the dangers of financial systems that have grown too big too fast. This note reexamines financial deepening, focusing on what emerging markets can learn from the advanced economy experience. It finds that gains for growth and stability from financial deepening remain large for most emerging markets, but there are limits on size and speed. When financial deepening outpaces the strength of the supervisory framework, it leads to excessive risk taking and instability. Encouragingly, the set of regulatory reforms that promote financial depth is essentially the same as those that contribute to greater stability. Better regulation—not necessarily more regulation—thus leads to greater possibilities both for development and stability.

CD-ROM contains: World Bank data.

This book provides insights into the evolving debate regarding the mobilization of domestic resources and the crucial role that financial development can and should play in this regard, exploring aspects of the financial development–domestic resource mobilization nexus, including country case studies.

This paper examines whether there is a threshold above which financial development no longer has a positive effect on economic growth. We use different empirical approaches to show that there can indeed be "too much" finance. In particular, our results suggest that finance starts having a negative effect on output growth when credit to the private sector reaches 100% of GDP. We show that our results are consistent with the "vanishing effect" of financial development and that they are not driven by output volatility, banking crises, low institutional quality, or by differences in bank regulation and supervision.

ICT-Driven Economic and Financial Development: Analyses of European Countries demonstrates the effects of ICT diffusion on economic, social and financial development by examining their impact on the structure and dynamics of national economies. It provides the insight into shifts observed in labour markets, international trade activities productivity factors, education and use of innovative financial products. It combines empirical analyses and data sources stretching back to 1990 make it an important contribution to understanding the effects of ICT diffusion on economic and financial development. The book answers questions such as how will national and regional economies react to upcoming ICT developments and growing usage, and what is the magnitude of impact of new information and communication technologies on various aspects of social and economic life. Demonstrates the process fo ICT spread across European countries Analyzes the value of ICTs from both economic and social perspective Examines structural changes in financial markets caused by ICTs implementation

This book attempts to study causal relationships between several measures of financial sector growth and deepening and economic growth in the Indian context, using annual data from 1950-51 to 2008-09. The relationship between financial sector development and economic growth can be analyzed from three angles: financial deepening leading to economic growth, economic growth leading to financial deepening and a bi-directional relationship between the two. The book gives a detailed description of the data used in this study, book further describes

the empirical methodology, the main tool of analysis are the method of Granger causality, Error correction Mechanism, Impulse Response Function (IRF) and Co-integration explained. The data used are annual data from Handbook of Statistics on the Indian Economy; Statistical Tables Relating To Banks in India, Banking Statistics, NSE News (Private Circulation), Fact Book of NSE, BSE annual reports, and Handbook of Statistics on The Indian Security Market by SEBI. All the variables were tested for unit roots using the Dickey-Fuller test (1979) which have been referred from the Enders (2003) to find out stationarity and study considers critical values at 5 per cent significance level. Unit root test is performed by using the R software and difference operators have been indicated with the numerical value. This study applied Granger causality test to verify causality between various variables of financial deepening and Gross Domestic Product and Per Capita Income as indicators of economic growth. It is shown that for a wide range of financial variables, financial deepening does indeed cause economic growth. However, the causality is not unidirectional; in a feedback relationship, economic growth too causes financial sector deepening. The study supports the claims of all three schools.

There is a vast body of literature estimating the impact of financial development on economic growth, inequality, and economic stability. A typical empirical study approximates financial development with either one of two measures of financial depth – the ratio of private credit to GDP or stock market capitalization to GDP. However, these indicators do not take into account the complex multidimensional nature of financial development. The contribution of this paper is to create nine indices that summarize how developed financial institutions and financial markets are in terms of their depth, access, and efficiency. These indices are then aggregated into an overall index of financial development. With the coverage of 183 countries on annual frequency between 1980 and 2013, the database should offer a useful analytical tool for researchers and policy makers.

In recent years there has been substantial theoretical and empirical work on the role that financial markets play in fostering economic growth and development. This paper provides a selective review of the literature, as well as new empirical evidence on the relationship between financial development and economic growth for a large cross-section sample of countries. While the results indicate that the effect of financial development on growth is positive, the size of the effect varies with different indicators of financial development, estimation method, data frequency, and the functional form of the relationship.

This paper provides evidence on the link between financial development and income distribution. Several dimensions of financial development are considered: financial access, efficiency, stability, and liberalization. Each aspect is represented by two indicators: one related to financial institutions, and the other to financial markets. Using a sample of 143 countries from 1961 to 2011, the paper finds that four of the five dimensions of financial development can significantly reduce income inequality and poverty, except financial liberalization, which tends to exacerbate them. Also, banking sector development tends to provide a more significant impact on changing income distribution than stock market development. Together, these findings are consistent with the view that macroeconomic stability and reforms that strengthen creditor rights, contract enforcement, and financial institution regulation are needed to ensure that financial development and liberalization fully support the reduction of poverty and income equality.

This book explores country case studies and works that detail the exact transmission mechanisms through which financial development can enhance pro-poor development in order to derive best practices in this field. This is an important companion for professionals and policymakers, and also a vital reference source for students.

Based on data collected on a wide range of financial sector indicators, new indices of financial development for countries in the Middle East and North Africa (MENA) are constructed, encompassing six themes: development of the monetary sector and monetary policy, banking sector development, nonbank financial development, regulation and supervision, financial openness, and institutional quality. The paper finds that the degree of financial development varies across the region. Some countries have relatively well-developed banking sectors and regulatory and supervisory regimes. However, across the region, more needs to be done to reinforce the institutional environment and promote nonbank financial sector development. Based on a subset of indicators, the MENA region is found to compare favorably with a few other regions, but it ranks far behind the industrialized countries and East Asia.

The gradual acceleration of growth in developing countries is a defining feature of the past two decades. This acceleration came with major shifts in patterns of investment, saving, and capital flows. This second volume in the Global Development Horizons series analyzes these shifts and explores how they may evolve through 2030. Average domestic saving in developing countries stood at 34 percent of their GDP in 2010, up from 24 percent in 1990, while their investment was around 33 percent of their GDP in 2012, up from 26 percent. These trends in saving and investment, along with higher growth rates in developing countries, have resulted in developing countriesâ€™ share of global savings now standing at 46 percent, nearly double the level of the 1990s. The presence of developing countries on the global stage will continue to expand over the next two decades. Analysis in this report projects that by 2030, China will account for 30 percent of global investment activity, far and away the largest share of any single country, while India and Brazil (at 7 percent and 3 percent) will account for shares comparable to those of the United States and Japan (11 percent and 5 percent). The complex interaction among aging, growth, and financial deepening can be expected to result in a world where developing countries will contribute 62 of every 100 dollars of world saving in 2030, up from 45 dollars in 2010, and where they account for between $6.2 trillion and $13 trillion of global gross capital flows, rising from $1.3 trillion in 2010. Trends in investment, saving, and capital flows through 2030 will affect economic conditions from the household level to the global macroeconomic level, with implications not only for national policy makers but also for international institutions and policy coordination. Policymakers preparing for this change will benefit from a better understanding of the unfolding dynamics of global capital and wealth in the future. This book is accompanied by a website, http://www.worldbank.org/CapitalForTheFuture, that includes a host of related electronic resources: data sets underlying the two main scenarios presented in the report, background papers, technical appendixes, interactive widgets with variations to some of the assumptions used in the projections, and related audio and video resources.

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