Back in the 1930s, economists predicted that we would only be working four hours a day. Yet people feel busier than ever, overworked. And right now there's a huge amount of fear regarding AI taking over jobs. We're going to explore that this week on Money for the Rest of Us. This is a personal finance show on money. How it works, how to invest it, and how to live without worrying about it. I'm your host, David Stein.

The Promise of Leisure

Here's a couple quotes from two economists back in the 1930s, looking at what they thought the world would be like today. Bertrand Russell felt that four hours a day would be enough for for individuals to work to meet their necessities, and they could do whatever they wanted with the rest of the time. In fact, there was some concern. Well, what would people do with all their time? And that was kind of John Maynard Keynes' point. He thought the economy would be so efficient that it would produce everything we need and.

But we would still want to work. That in order to kind of feel some satisfaction, we would want to do some work. And we're not there. We work so much harder than we ever have. What happened? Why didn't their predictions come true?

What Happened Instead

Well, it turns out the economy is as productive as they expected. The ability to produce more and more with fewer resources. That's true. But what happened instead is we invented a lot more things. We had a lot more needs and wants that we wanted filled. And that created many, many more new jobs. Occupations that didn't exist in the 1930s. Every category saw more jobs. 60% of job titles didn't exist that are here today didn't exist in 1940.

Where New Jobs Come From

Here are some examples of how jobs have changed. These are examples of job titles that were added to the U.S. Census survey on on different jobs. So back in the 40s, a new job, new technology, airplane designer and a tattoo or tattoo artist was a was a new job in 1940. And so what what you see is as we we got more leisure or the economy got more productive.

There were things and frankly, wealthier we could afford, things that we couldn't afford before hypnotherapist, we could go to amusement park and have a drama therapist and other new jobs coming out of technology, a cybersecurity analyst, artificial intelligence specialist, and so many different jobs, new jobs were created. I mean, look at my job, a podcaster that didn't exist 20 years ago. And so that is kind of what happened. We invented more things, newer, just different things and our needs change. And so we've produced more and more because we want to consume more and more. And that has led to more opportunities.

My First Job

Now, at the same time, the technology changes. And I think about my first job, I was a credit analyst at at AT&T Capital. We we leased equipment, we leased point of sale equipment from NCR. We leased grocery checkout equipment, ATMs. And I spent a lot of time as a credit analyst putting together

reports. I used a computer, but it was a very manual process. When we look at that role today, it it definitely doesn't exist in, in, in the same way, because AI can can much more effectively do that.

And this was in the early 90s. So the internet wasn't real. I mean, the internet was there, but not the World Wide Web as we have it now. And that job, that role would have changed significantly and much of it would have been automated. And that's that's kind of the path that we see. And I look at other jobs that I've had, much of that work would have been automated. And so roles change over time as technology evolves. And we'll see that that that's what drives the stock market.

That's what allows the economy to grow. But right now, there's a lot of worry that, well, will AI take over jobs? And this is a theme I've covered on the podcast. Ten years ago. I did my first episode on this topic, Will robots take over your job? And we've done one every few years.

And so this is kind of a check back to see where they are, but to understand kind of the principles of, of, of how it works and how it's connected and how it's always evolving and changing the job market as we create new needs and wants and new roles step up to, to kind of take over or to do different jobs that didn't exist before because there's a need now, in some ways, when we think about where we are today.

Time Poverty

The predictions were four hour work days, all kinds of leisure. And and yet people today feel like they have time poverty, they don't have enough time. And it undermines their mental health and work performance. And there's, there's very there's systematic reasons for this, but there's also just how, how we allocate our resources and what we value time versus money. But there is this sense of, in order to be productive, you have to be busy.

And, and, and it, it's still like that in the workforce, which is a shame. The idea that busy work or looking like a work face time. You have to be there and you have to look busy. You have to be on Slack and you. And you're penalized if you don't comment on Slack enough. And that gives a feeling of time poverty that we don't have control over our time. And it definitely undermines our, our sense of well-being, our abundance, our sense of, of intrinsic value. If we feel like we, we don't have control of our time.

What Makes Us Time-Poor

Now here's, here's some reasons for that. The way that, that the workday is broken up and fragmented times. We're, we're constantly interrupted. And there's a lot of idle time. As a credit analyst, I would do a report and, and our head credit guy was seems like he was always on the phone talking to our leasing reps that that wanted an approval done. And he would argue why, you know, they needed additional basically collateral, and I couldn't finish a credit unless he approved it and we discussed it, but he was always on the phone.

And so I would go and I would just you would sit in the chair and wait for him to go get off the phone. And it at times you would, you'd be sitting there 20 minutes. So a lot of idle time and fragmented time interruptions in the organization, a lot of paperwork that that governments require and just just silly

things or businesses. Et cetera. There's just busy, busy work. Commuting. Commuting takes a lot of time for for many individuals. And that makes us feel time poor.

The other thing is, is that we often undervalue our time when we think about, you know, we feel worse about losing some money than we do about losing time because it happens so gradually and incrementally. So. So part of it is systematic, but part of it is also kind of whether we value our time or not and whether we're building in blocks of leisure, trying to get rid of some of the fragmentation that that we put on ourselves by sort of jumping from one thing to the other, trying to multitask, rather than carving out time for deep work time that we're not interrupted.

And that's important. Anything we can do to control our time gives us a better sense of well-being and makes us feel less time poor.

Russell's Pin Factory

Now, there's some other systematic things that that has sort of prevented us from getting to work only four hours a day. And it was something that Bertrand Russell pointed out in a really interesting example of a pin factory when he looked at the capitalist system. He gives an example. So there there are factories that make pins, and let's say there's a new technology that doubled the production of pins. And he says the sensible thing to do was that?

Well, the workers would only work half the time to make the same amount of pins. But what actually happened is all the different pin companies continued to to make as many pins as they can with this new production. Everybody worked eight hours making it, except then there were too many pins. And so some of the pin manufacturers went out of business. So then you had half the people still working eight hour days and the other half were unemployed. Now, just a thought experiment.

The Pin Factory and AI

But as I thought about that, it's sort of similar where we are today with the AI infrastructure build out. We have a lot of companies competing in terms of compute, you know, as they have this, this AI demand or demand to use AI. And and so the hyperscalers are building. And the question is, will this be like the pin factory? So suddenly there's so much more compute and there's going to be more AI infrastructure then is actually needed. And we talked a little bit about this last week.

And so it's uncertain. And if there is an over capacity, then that that potentially will, will hurt investors, especially those that lent money to backing these data centers. But the it'll be good for us as users because the cost will be much, much lower because potentially there will be an oversupply.

From Workers to Returns

Where do workers fit in in terms of economic growth and the returns for the stock market? Well, what drives GDP or the value of what is produced is the number of workers. And how fast is that working age population growing? As more workers come on, they can produce more. The other thing is productivity. How how productive those workers are and those combined mathematically to, to form gross domestic product or GDP. At the same time, the drivers of the stock market is the earnings per share growth.

How are corporate earnings growing? Both public traded companies as well as private. And that is also tied to economic growth because economic growth is the value of what is produced. Who produces? Businesses. And if they produce efficiently then they have earnings because corporate earnings essentially are corporate savings. It's it's generating enough revenue more than the expenses. And so we have earnings per share growth drives the stock market.

We have the share of the profits that pay out as dividends that drives it. And then what are investors paying for dividends in earnings per share growth. Those mathematically lead to what the return of the stock market is. And so economies or countries that have a faster growing economy will, over the long term, have a better performing stock market. And that's why there's so much focus on, well, what is, is the working age population growing and is it becoming more efficient? How innovative is an economy?

Working-Age Population Stalls

And we look at that for the U.S. There's a concern. The working age population in the U.S. is stagnating. And so that potentially means slower economic growth and potentially lower returns for the U.S. stock market. Now there's other developed countries have a similar issue. But if we just look at the projections from this is the Social Security Trust trustee's report. And this came out just a few months ago. They're essentially assuming a plateauing of working age population.

Now the working age population has been slowing as we look at it. You know, this is overall population growth, but it used to grow essentially 1% a year. And now in it, it's essentially going to flatline to actually start shrinking. And again, this can hurt long term investments.

Making Up for Fewer Workers

Now the every. Like if the individuals or the businesses produce enough for everybody, that's fine. We've seen this in Japan where the population has been shrinking and that like on an individual basis, things can still be fine. But collectively there's always a concern, well, we're not growing then. Will there be enough in and how will investments do now if there are fewer workers? You make up for it with automation. And we've seen this in various economies.

And also if the workers are better educated, they have more human capital that can help. Immigration can help. That's a way to offset a slowing worker population. And in one of the things that, you know, if the population is shrinking as it gets older, then then their demand needs change. They might not buy as much stuff, and that could draw down the economy. They certainly will buy different things, more health care related things.

From Surge to Slowdown

But let's look at immigration here for a moment, because that is a way to increase the the population, the working age population in order to meet demand for workers. So this was the annual net immigration for the U.S. And you can see that it can be choppy. This is the projection by the CBO about, you know, just over a million a year. And but you see the big surge in in 2022, 2023. And that, you know, a lot of that was illegal immigration.

We just had a book club and we read a book on what was called The Truth About Immigration. Hernandez was the was the author. And we were we were kind of talking about this. And I did not realize that the U.S. has not increased the level of annual legal immigration in the U.S. since 1965. It's been capped. So as the economy has grown, the number of legal immigrants that are allowed to come in has not. And many of them are more family oriented. They.

The amount of of sort of worker based immigration that companies need is has not grown at all. But there's still that demand there. And, and that certainly encouraged a lot of illegal immigration. But I mean, immigration is a way to kind of offset the slowing worker population. But but it is not the only way. It doesn't have to be. I mean, there, there are definitely economies, countries that say, no, we just don't want it. And Japan would be one of that.

They're trying to cope with a declining population. But by not massively increasing immigration, there's an academic study that I'll link to in the show notes that we refer to in this slide that they did look at, you know, in areas where there are lower birth rates. So there are fewer younger workers. There, the companies became more efficient. There was innovation. And and that actually led to more output per worker. And so they were able to. If you.

One way to measure productivity is, are they is each worker producing more. And it actually worked and as is. And so that is a way to do it. And that's what that's sort of a choice a country has to make.

The Value of Diverse Ideas

Now there's some downsides to not having immigration. You don't get the diversity, the diversity of ideas, and it broaden out culture. And one of the fascinating examples in this book is, is the U.S. they did very well in the first World Cup in 1930. And but then they didn't really do very well for 60 years. And it was during that time frame that that immigration was incredibly clamped down in the U.S. And so you didn't get good soccer players like we had in the past, because the U.S. didn't necessarily have the history of soccer.

Now, sports is just one area, but all the other areas, individuals with different backgrounds have different ideas. And so having some level of immigration, legal immigration is important to to kind of get diversity of ideas and, and academic studies has shown doing that actually helps an economy grow, not just because there's more workers, because the workers interact, the domestic and those that were born here versus the immigrants, they work together and it becomes just a richer culture and a more innovative culture that that has been shown in numerous academic studies. But there's always a balance there.

Two Kinds of Innovation

Now, there are two types of of innovation. And this can where there's some controversy. So there's the innovations that basically it's augmentation. It improves what the worker does, it helps them do better things and often more complicated things because of the technology. And AI is, is kind of where we're at today. AI helps me do better as an investment strategist. I can cover more data. We can be more helpful for people as we. We build tools and software to help our.

The individuals that we assist as members of Money for the Rest of Us Plus. And so it's very much augmentation, but AI can also be used for to replace people and. And as a result, it doesn't necessarily lead to, to new job titles. If it's augmentation, that's a lot of the new jobs podcaster is, is a result of innovation that led to the free data plans, mobile phones, etc. When the automation is just replacing people, then potentially the employment shrinks. And that's one of the worries with AI.

Kiosks: Replace or Augment?

Now, I thought about this example back in. It's been it's been about ten years ago that McDonald's started introducing self-order kiosks in McDonald's restaurants. And part of it was because some states were raising minimum wage and is. And I spend probably an inordinate amount of time at McDonald's, usually for breakfast, just ordering an egg. But when we look at this kiosk, then this is an interesting example. So the kiosk there, it takes the order, it takes payments and it's a task.

It was automated. If you go to a typical McDonald's, there's nobody there at the counter anymore. On occasion you get somebody it if you need something. But what were some of the other tasks that came about? They brought food to the tables. I mean, they didn't used to do table service at McDonald's. Now they're bringing your food. They'll more and more people go to McDonald's. They go through the mobile drive in. If the order's not ready, they have you pull around.

And so they have workers that come out. They actually have more kitchen work per order. But if we look at the overall restaurant industry, the average workers per restaurant in the U.S. is down over the past ten years. So in this case, we have a technology that is made workers more efficient. Well not not more efficient. Just replace the workers. They had other tasks. And this is kind of one of the issues with with always with technology. Some jobs are, are are replaced.

New jobs can be created if it's an augmentation. But there's always that tussle between the two. And that's exactly what we're going to see with AI. There will clearly be some replacements.

Jobs That Shouldn't Exist

Now many of these jobs probably shouldn't exist. They're boring jobs. I think about when I was in graduate school getting my MBA. My job was to put together the Miami University Factbook. And it was a part time job. I used a computer, but it you know, I didn't have any design skills, but a lot of that is a good design person could have put that together very, very quickly. It took me an entire semester. It's something that probably today could be done in a week.

Now, I'm not just saying turn turn it over to AI because you want something like that. You don't want AI just making it up. You you want a design professional, but they could leverage that tools and it becomes it's an efficiency that's gained and, and some of the jobs, they just shouldn't exist. LaPriel worked. You know, this is back when we first got married, she worked for a bank as a clerk. And her job was to reconcile these two, two balances, basically these I don't even know what they were reconciling.

But she was sitting there with a, a machine adding up numbers to see if the two columns would match. And even back then she went to their boss. It was like, why don't they just program a program that could match that and do it? And it's like, well, because in that case, it was cheaper to to just have the

workers do it. And they just, they didn't were busy. And then maybe in the sense they didn't want to replace the workers, but so many jobs, it's just so normal for jobs to change because of technology.

And a lot of the jobs probably shouldn't have been there in the first place. They're just kind of boring. And we'll see that with with, with AI. Hopefully it'll lead to, to more interesting work for many, many individuals as they leverage this, this, these tools that augment what they can do that makes them smarter, makes them more creative.

Which Tasks Get Automated?

Now, here's another example from an academic paper. And they were looking at accounting and, and they were looking at when the technology does help, you know, it did the basic arithmetic, it automated some task and that left the it did replace jobs, but those that stayed in accounting because they could be more effective and focus on something that the computer couldn't do. Their wages went up for this study, whereas when technology replaced sort of inventory clerks as opposed to accounting clerks.

The technology very much replaced the rote things that they did. Employment skyrocketed, but wages actually fell. So it depends on how the technology is used and whether it allows the workers to increase their value of what they do. Because the technology is, is replacing the boring things, the the lower value added things. And again, this has always been that tussle. We don't know how it's going to turn out for AI. It'll likely be a combination of of both. Some workers are going to get replaced. Others are going to be able to, to level up and do different things that weren't possible before AI and other robotics were there.

Two Labor Paths

So we have two paths. When we think about labor, we have that when workers are scarce, firms do adopt labor saving technology. They become more efficient, efficient, and so output per worker rises. But we also have jobs. Some jobs just get replaced, those that can be automated. Now, when there's a lot of workers and let's say there's massive immigration, there's less of an incentive for companies to actually innovate because they can use cheap labor to do that.

And, and that actually can lead to some distortions in the economy. And that's what we saw with a huge bump up in illegal immigration in the early 2020s. And there was a report that we'll link to in the show notes by the Federal Reserve Bank in Dallas. They showed that the huge bump in illegal immigrants actually led to higher home prices than it would otherwise because of that. Now, when immigrants come in, they also create demand, though. I mean, they they They need to eat.

And so again, there's always that balance. So we'll see how this plays out in in the coming years. How to what extent does AI replace jobs or augment jobs. I mean, there are predictions that it's going to be just absolutely massive and there's going to be massive levels of unemployment. We've not seen that. There are always a lot of turmoil and turnover in the job market. So we'll see and monitor as it evolves.

Taking Back Our Time

What we need to do as individuals is figure out how do we feel less time poor to try to to certainly structure a workday to the extent we can, that we don't feel so fragmented and overly busy and actually

have time to do the deep work to, to figure out how do I use AI to increase my creativity, my output, the work that I do.

So we'll see as things go. This is episode 569 of Money for the Rest of Us. Thanks for listening. Everything I've shared with you in this episode has been for general education. I've not considered your specific risk situation. I'm not provided investment advice. This is simply general education on money investing in the economy. Have a great week.